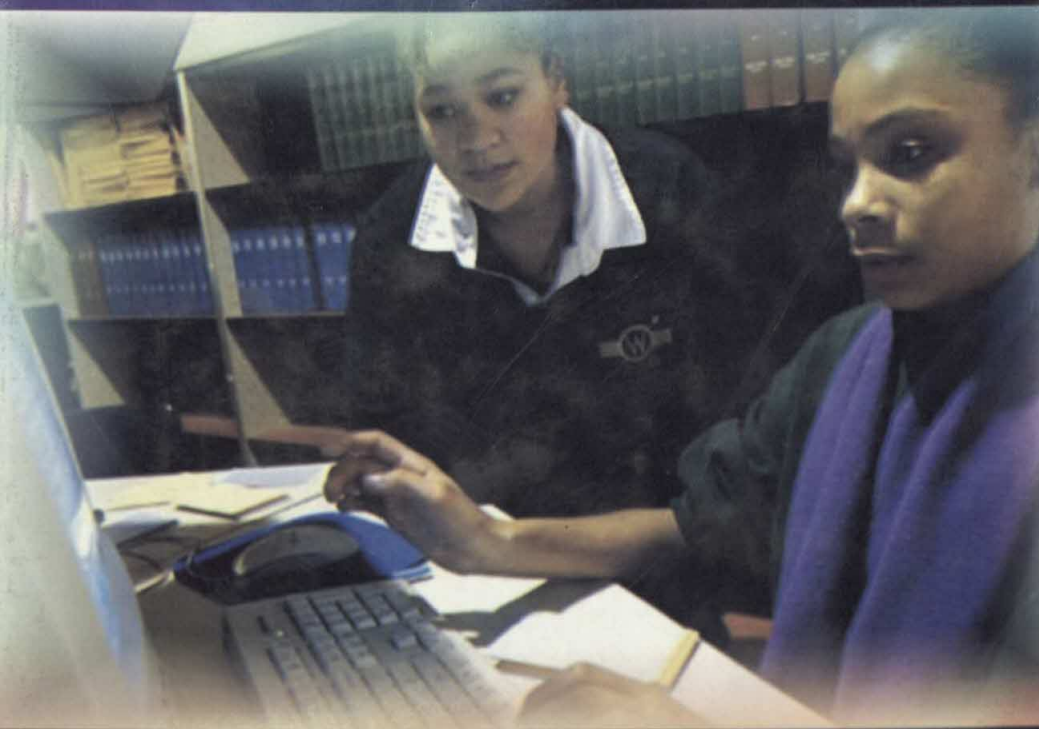


SPECIAL EDUCATION AND SOCIAL DEVELOPMENT

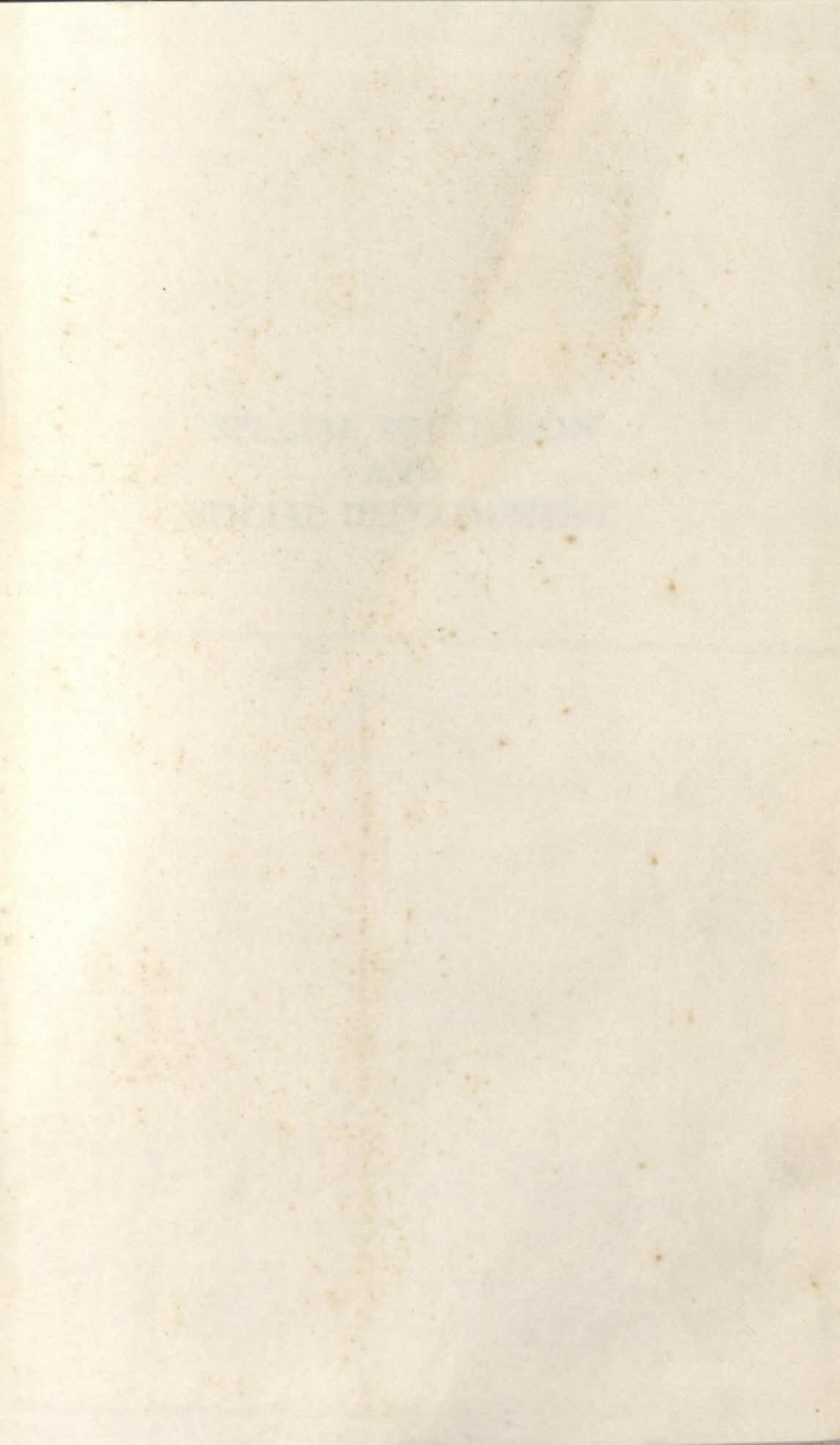


WILLIAM JAMES

The concept of special education was materialised by gradual and constant developments having social development at core. Special education is meant for children with significant disabilities such as impaired hearing, cerebral palsy, visual impairment, intellectual disability of emotional disturbance.

Here in the present book we have chosen twelve articles, representing the crucial issues pertaining to Special education and social development. The themes include—Literacy and Special Education; Need for Community Services for the Mentally Handicapped; Reading: Making a Start; Socialization Process and Special Education; Problems of Severely Mentally Retarded Children; Some Research Perspectives in Special Education; Reading: Additional Techniques and Resources: Findings from a Programme for Non-Retarded, Low Income Preschool Children; Epidemiology and Evaluation of Services for the Mentally Handicapped; Improving Social and Peer Groups Acceptance; Supporting Development in Writing; Developing Spelling Skills etc.

The information contained herein will benefit researchers, students, and teachers besides the educational policy planners, social scientists and socio-educational activists in the field.



**SPECIAL EDUCATION
AND
SOCIAL DEVELOPMENT**

Special Education and Social Development

Edited by
WILLIAM JAMES



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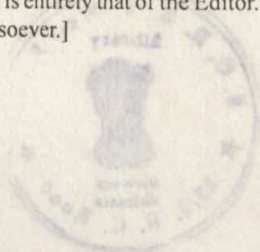
Special Education and Social Development

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PREFACE

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PREFACE

The concept of special education was materialised by gradual and constant developments having social development at core. Special education is meant for children with significant disabilities such as impaired hearing, cerebral palsy, visual impairment, intellectual disability of emotional disturbance. Quite dramatic improvements can results from special coaching of even the most difficult children.

Research on the ecology of child development, particularly the interaction of the child with his social environment, is needed to analyse the factors impeding socialization. Intelligence is also a major dimension of adaptation that contributes to prediction of social achievement.

Here in the present book we have chosen twelve articles, representing the vital issues pertaining to Special education and social development. The themes include—Literacy and Special Education; Need for Community Services for the Mentally Handicapped; Reading: Making a Start; Socialization Process and Special Education; Problems of Severely Mentally Retarded Children; Some Research Perspectives in Special Education; Reading: Additional Techniques and Resources; Findings from a Programme for Non-Retarded, Low Income Preschool Children; Epidemiology and Evaluation of Services for the Mentally Handicapped; Improving Social and Peer Groups Acceptance; Supporting Development in Writing; Developing Spelling Skills etc.

We hope, the information contained herein will benefit researchers, students, and teachers besides the educational

policy planners, social scientists and socio-educational activists in the field.

We owe a deep sense of gratitude to all great scholars, whose writings and opinions are cited and borrowed substantially. We are thankful to Mr. J.L. Kumar, Managing Director, Anmol Publications Pvt. Ltd., New Delhi, for publishing this book in superb way.

— Editor

1

LITERACY AND SPECIAL EDUCATION

Learning to read is not a simple task, even for some children of average intelligence. It may be a very difficult task indeed for children with significant disabilities such as impaired hearing, cerebral palsy, visual impairment, intellectual disability or emotional disturbance. For example, hearing impairment often limits the child's general vocabulary development and restricts awareness of the phonemic structure of words. Cerebral palsy, even if not accompanied by intellectual impairment, may cause visual perceptual problems and a tendency to become fatigued quickly in tasks which require carefully controlled eye movements. Vision impairment may necessitate the use of magnification aids and enlarged print; or in the case of blindness may require the substitution of braille materials for conventional print. Intellectual disability results in a much slower learning rate; and the child will be ready to read at a much later age than is normal (Westwood 1994). In some cases, if the disability is moderate to severe, the student may never reach this stage during the school years. Emotional disturbance may cause a child to be so preoccupied that concentration is impossible and motivation is totally lacking. Yet almost all these children can be helped to master the basic skills of word recognition and comprehension of simple texts. Quite dramatic improvements can result from special coaching of even the most difficult children (Connors 1992; Swicegood and Linehan 1995; Lingard 1996).

It has been said that there is no one method, medium, approach or philosophy that holds the key to the process of learning to read. From this it follows that the greater the range and variety of methods known to teachers the more likely it is that they will feel competent to provide appropriate help for slower learners and children with specific learning difficulties. Gillet and Bernard (1989: 16) have commented: 'Research and our own experience suggests that the approach which is successful with all children with reading difficulties is one which combines features of a number of different approaches and is adapted to a child's individual needs'.

Current Language Arts Philosophy

The whole language approach

In Britain, Australia, New Zealand and North America the contemporary approach to beginning reading instruction has been influenced greatly by the works of Smith (1978, 1992), Goodman (1967, 1989, 1994a, b), and Cambourne (1988). It is the viewpoint of these writers that literacy skills are acquired by children through 'natural learning' rather than through direct teaching. They consider that children acquire literacy skills in much the same way as they earlier learned to use speech for purposes of communication, without having to be taught the process. Learners engaging actively with print are considered capable of constructing meaning for themselves by experimenting with language, taking risks, guessing, predicting words and self-correcting when necessary. It is believed that immersion in a learning environment where reading and writing are valued pursuits will stimulate all children to want to become literate.

The approach to literacy learning advocated by Goodman *et al.* is one that is essentially child-centred, and involves providing children with daily experiences in using reading and writing for 'real' purposes, rather than engaging in decontextualized exercises. As Goodman (1989: 70) has

described the situation. 'Children learn to read and write as they read and write to learn and solve problems'. This method of facilitating literacy acquisition has become known as 'whole language'. Goodman (1989) insists that 'whole language' is not a specific method or approach; but rather a philosophy of learning and teaching across the curriculum. However, for convenience of communication in this book, whole language will continue to be referred to as a teaching approach.

Principal features of whole language

The application of the whole language approach at classroom level usually embodies at least the following principles:

- reading good literature to students every day, and having 'real' literature available for students to read for themselves;
- providing time each day for sustained silent reading;
- providing daily opportunities to read and write for real purposes;
- teaching reading skills always in context, rather than in isolation;
- integrating the curriculum to allow literacy skills to be utilized across all subject areas.

While reading, the emphasis is upon making meaning from text, using all available cues to assist with the process. The three main cueing systems readers are encouraged to use are:

- the semantic (the meaning of what is being read);
- the syntactic (the logical grammatical structure of the sentences or phrases);
- the grapho-phonetic (the correspondence between the

symbols in print and the speech-sound values they represent).

The views of whole language enthusiasts reflect a very strong swing against the explicit teaching of specific component skills of literacy, such as letter recognition, phonic decoding and spelling. It is believed that children will develop an understanding of the alphabetic principle for themselves as they endeavour to read for meaning and write for genuine purposes of communication (Moustafa 1993).

The meaning-emphasis viewpoint of the whole language approach implies that if a reader is thinking intelligently about what he or she is reading almost all the 'guessing' of words and meaning is based in semantic and syntactic cues (the 'top-down' approach), and very rarely is it necessary for 'natural' to resort to decoding a word from its letters or syllables (the 'bottom-up' approach). For this reason attention to phonics is given a significantly lower priority than in many other traditional approaches to teaching reading.

Whole language purists insist that phonic decoding skills and spelling skills should not be taught through specific drills or exercises used in isolation. They believe that decontextualized activities of this type actually make the learning process more difficult. Advocates of the whole language approach argue that phonic skills and spelling skills *are* in fact taught within the approach, but not as ends in themselves, and are always presented in context (Newman and Church 1990; Tester and Horoch 1995). It is claimed that these specific skills are tackled with individual students at the moment when their use serves an immediate purpose, for example, when a student is needing to spell a particular word correctly or to identify a word that cannot be predicted from context.

The whole language approach often incorporates the use of literature-based programmes, using authentic texts rather than vocabulary-controlled graded books. Reading materials

from other subject areas, such as mathematics, science and environmental education, are frequently used within the programme. It is believed to be important to offer the students multiple texts and different genres if reading and writing are to be used in truly relevant ways.

Exponents of the whole language approach claim that it is valuable, not only for students who learn to read and write easily, but also for students with special learning needs and adults with literacy problems (Newman and Church 1990; Crux 1991; Swicegood and Linehan 1995). However, the whole language approach is not without its critics (e.g. Pressley and Rankin 1994; Harrison, Zollner and Magill 1996). The views of the whole language advocates may hold true for children who learn to read easily—they may well acquire reading skills almost as a natural developmental process. However, teachers who have worked with students exhibiting chronic reading problems know that in the majority of cases it is essential to instruct these children in word recognition strategies, letter knowledge and decoding skills if they are to make progress. A focus on meaning is, of course, essential when teaching children to read; but without the ability to use basic word identification skills, predicting from context can be very unreliable (Merry and Peutrell 1994). As Heymsfeld (1989: 68), commented when arguing for inclusion of explicit basic skills instruction within the whole language approach, 'We cannot depend on haphazard, amorphous lessons to teach something as critical as knowledge of the alphabetic code'.

Problems arise within an exclusively whole language approach when a child is not at all skilled in contextual guessing. Perhaps the child's experience with language, particularly the more elaborate language of books, has been very restricted, and the child's own vocabulary is limited. No teacher would deny that the purpose of reading is to make meaning, or that the more reading one does the more likely one is to become a better reader and to enjoy the activity.

However, it is relevant to wonder if one can make complete meaning and read fluently without at some stage having acquired the necessary word-attack skills to employ when context clues are inadequate?

Decoding Skills

The general terms 'phonics' and 'phonic decoding' relate to the reader's ability to use a knowledge of the relationship between letters in print and the speech sounds they represent in order to identify an unfamiliar word. The terms also relate to the writer's ability to use letter-to-sound correspondences in order to attempt to spell an unseen word by attending to its component sounds and syllables.

There now exists a vast body of research that supports the explicit teaching of phonic knowledge to children in the early stages of learning to read (e.g. Chall 1989; Adams 1990; Chapman and Tunmer 1991; Snider 1992; Biemiller 1994). This instruction does not replace reading for meaning or enjoyment, but rather embeds within the meaning-emphasis approach some very systematic teaching of letter—sound correspondences. Without such information children are lacking a reliable strategy for unlocking words. In the earliest stages of learning to read, children have not yet built up a large vocabulary of words they know instantly by sight, so they must use knowledge of letters and letter clusters to help identify unfamiliar words. Children cannot really become independent readers unless they master the code.

The most basic level of phonic knowledge is that involving the common speech-sound associated with each *single* letter of the alphabet. This knowledge is useful to the beginning reader but is fairly limited in its application, since not all words follow a regular letter-to-sound correspondence. Of far more functional value to the reader and writer is the next level of phonic knowledge represented by recognition of common letter clusters, or strings of letters, such as

pre-, un-, -ing, -tion, -ough, -ite, -ous, -air, -ee, -ie, -ea-, etc. These units, although not necessarily having a perfectly consistent sound value in all words in which they occur, are certainly far more predictable than single letter-to-sound correspondences. When children equate strings of letters with larger units of sound, such as syllables in spoken words, many of the inconsistencies in English spelling patterns are removed.

Learners differ in the extent to which they pick up phonic principles incidentally. Many children will deduce the code and its rules for themselves, but some will not. The judgement of just how much emphasis to give the teaching of phonics needs to be made on an individual basis. As far as gaining an understanding of the grapho-phonetic system is concerned, there seem to be three types of children: those who gain insight on their own, with little or no direct instruction; those who need some initial instruction and then make progress on their own; and those who will never master it on their own, knowing only as much of the system as they have been directly taught.

The present writer's experience as a remedial teacher and as a teacher of primary and secondary special classes, suggests that the vast majority of children with reading problems exhibit poorly developed phonic knowledge and inefficient word-attack skills. They benefit from a carefully structured supplementary phonic approach in order to develop the skills which they currently lack. This view is upheld by the work of Mather (1992), Gunning (1995) and Gaskins *et. al.* (1995).

It must be stressed here that an *exclusively* approach is not being advocated for any child, with or without special needs. It is being argued that within a total reading programme due attention should be given to the teaching of decoding skills for those children who need this instruction.

The whole language and literature-based programmes emphasize the importance of such matters as:

- surrounding the child with stimulating reading material;
- creating a climate where reading is an enjoyable, necessary and valued occupation;
- the teacher modelling good reading performance and attitude;
- giving abundant encouragement to any child who makes the effort to read independently.

It is argued here that these factors create a necessary *but insufficient* condition to ensure that all children will become proficient readers. It is when learning is left to chance that the child with learning problems is at risk. To reduce the possibility that some students will not become good readers the additional factors listed below must be considered when implementing the mainstream reading curriculum.

The Priority Needs of Students with Reading Difficulties

The child who is experiencing difficulties in learning to read needs to have the following components in his or her daily literacy programme. Many of the features listed below are already incorporated in the approach known as Reading Recovery (Clay 1985), which is described in the next chapter.

- An emphatic and enthusiastic teacher.
- Abundant opportunity to read for pleasure and for information.
- An understanding of what the task of reading actually involves and what purposes are served by reading.
- Successful practice, often using material which has become familiar to the student.
- An improved self-esteem through counselling, praise, encouragement, success and the recognition of personal progress.

- A carefully graded programme, which may mean the creation of much supplementary material to use alongside the mainstream programme to provide additional practice. If child-produced or teacher-made books are being used either alongside or instead of other literature they must be used in a structured rather than an informal manner in order to teach effectively.
- More time will need to be spent on early reading activities (e.g. flashcards, word-to-picture matching, simple copy-writing, sentence building, etc.).
- More time must be spent in overlearning and reviewing material at each stage.
- If graded reading books are used, careful preparation of sight vocabulary is needed before each new book is introduced to ensure success.
- Phonemic awareness training (e.g. discrimination of sounds, blending sounds into words, segmenting long words into syllables, etc.) may be needed before decoding skills are taught.
- Systematic teaching of phonic knowledge and word-building, unless contra-indicated by speech or auditory problems. The skills taught should stem from, and be applicable to, the actual reading material being used by the student.
- Daily expressive writing activities, with guidance and feedback.
- Correct letter formation (printing) and handwriting, taught alongside the reading activities.
- Finger-tracing and other multi-sensory approaches (e.g. textured letters) may be needed by a few children

with disabilities to aid assimilation and retention of the material taught.

Whatever the approach being used in mainstream classes, these basic needs of the student with learning difficulties must be met. The development of literacy skills must be given very high priority for such children.

There is evidence that after swinging too far toward the excesses of an unstructured, child-centred, whole language approach, language arts teaching is now moving back to a more balanced programme (Adams 1994; Zalud, Hoag and Wood 1995). As Pressley (1994:211) has observed, 'Experiencing more explicit instruction of reading skills and strategies in no way precludes the authentic reading and writing experiences emphasized in whole language. Rather, explicit instruction enables at-risk students to participate more fully in such literacy experiences.

Diagnostic Assessment

In order to cater most precisely for the specific needs of students with learning difficulties, it is necessary to appraise their current skills and knowledge. The starting point for any literacy intervention should be based on the results of some form of assessment of the child's current abilities. Such an assessment need not involve the use of highly sophisticated tests, and should not be a lengthy procedure. If a large amount of information is necessary in order to plan a programme, the assessment of the child should be spread over several short sessions. One is basically seeking answers to the following four key questions.

- What can the child already do without help? What skills and strategies has the child developed?
- What can the child do if given a little prompting and guidance?

- What gaps exist in the child's previous learning?
- What does the child need to be taught next, in order to make good progress?

Figure 1.1 summarizes the key steps involved in implementing a diagnostic approach to an individual learner. It begins with assessment and leads to programme planning and implementation. The procedure is applicable to all the main areas of the curriculum, and it will be referred to again in the chapters dealing with writing, spelling and arithmetic.

The various stages in Figure 1.1 may be interpreted thus:

Stage 1. This may involve the use of checklists, tests, inventories, as well as naturalistic observation of the learner. In the domain of reading the most useful procedure is to listen to the child read from an appropriate text and to note the strategies used and the errors made. Is the child confident and fluent? Does the child self-correct? Is the child very dependent upon adult assistance?

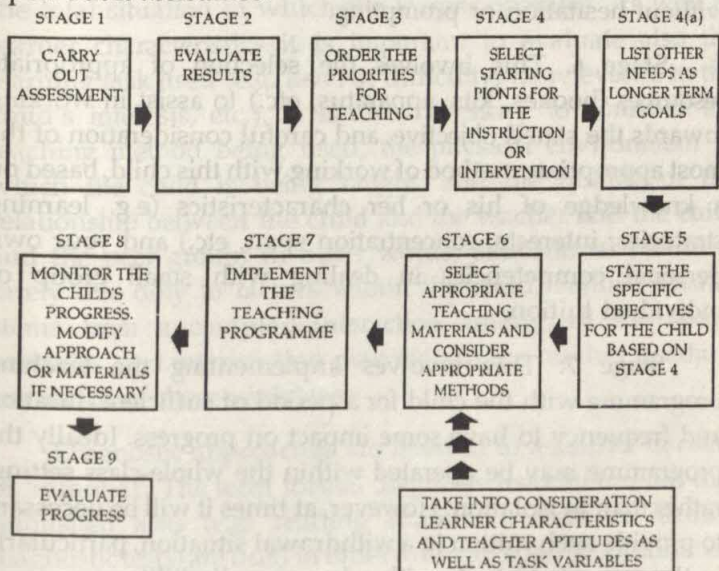


Fig. 1.1. The diagnostic model

A running record of errors, self-corrections, requests for help, etc., can be noted on a photocopied version of the child's text.

Stage 2. This involves looking at what you have obtained from the assessment of the child performing in a particular skill area (e.g. reading) and applying the four diagnostic key questions referred to above.

Stage 3. This involves the identification of the most serious gaps in the child's previous learning which may need to be remedied.

Stages 4 and 5. These involves the selection of a starting point or teaching aim from the data analysed in Stage 3, and the writing of a specific student performance objective to make that aim: operational: e.g. teaching aim: 'to increase the child's basic sight vocabulary'; performance objective: 'given the twelve most commonly occurring words from the key words list presented on flashcards the child will read these aloud without hesitation or prompting.'

Stage 6. This involves the selection of appropriate resources (bookes, kits, apparatus, etc.) to assist in working towards the stated objective, and careful consideration of the most appropriate method of working with this child, based on a knowledge of his or her characteristics (e.g. learning strategies, interests, concentration span, etc.) and your own personal competencies in dealing with small group or individual tuition.

Stage 7. This involves implementing the teaching programme with the child for a period of sufficient duration and frequency to have some impact on progress. Ideally the programme may be operated within the whole-class setting, rather than in isolation. However, at times it will be necessary to provide such tuition in a withdrawal situation, particularly in the case of students with a learning disability.

Stage 8. This involves an overlap with Stage 7, in that you are required to determine whether your programme is working effectively by the use of an ongoing (formative) evaluation of the child's performance.

Stage 9. This involves some definite procedure for assessing how much real change has occurred in the child as a result of the programme (summative evaluation). This is usually carried out at the end of the teaching block and is linked directly with the stated objective at Stage 5.

Note that when working with and testing a child, it is important to observe the child's learning strategies and task-approach skills, as well as the actual responses being given. For example, has the child selected a particular answer after careful thought or was it an impulsive guess? Is the child hesitant and underachieving because he or she is wary of the adult and unwilling to take a risk?

Diagnosis must eventually involve a consideration of the total situation in which the learner operates. As well as learner characteristics it is important to evaluate also the learning task itself (e.g. level of difficulty, its relevance to the child's interests, etc.). It is also necessary to consider the teaching method being used, the physical environment in which the child is being taught, and the quality of the relationship between the child and the teacher and the child and the peer group. In other words, educational failure is rarely due only to factors within the child. Failure usually stems from a complex interaction among all the above variables, and intervention may require the teacher to adjust any or all of these variables.

Diagnostic approaches are referred to as either 'formal' or 'informal'. The term formal diagnosis usually implies that published tests (e.g. reading attainment tests or reading diagnostic tests) are used in order to obtain specific information about a learner's current status in certain selected areas such

as comprehension, word recognition, phonic knowledge. Sometimes particular component skills are assessed, such as phonemic awareness, visual discrimination or short-term auditory memory. Formal assessment may be carried out for a whole class simultaneously, for example by the use of pencil-and-paper group testing. At other times formal assessment must involve the careful and detailed testing of one child alone, using standardized or criterion referred to tests. Formal assessment of this type is useful in indicating where current achievement stops and new learning needs to begin. It is usually supplemented by information from informal testing, and from observation and classroom records.

Informal diagnosis involves such procedures as direct observation of learners in action, and an examination of what they actually do or what they produce during a lesson. Informal assessment in reading includes, for example, listening to a child read aloud and detecting the presence or absence of particular strategies for word-attack, use of context, prediction, comprehension, general fluency and expression. The use of teacher-made informal reading inventories may be of value here. The inventories comprise sample paragraphs, graded from very easy to more complex, taken from books available in the classroom. A child's level of success on the inventory will provide a good indication of the readability level of books he or she can cope with independently and for instructional purposes. Performance on the inventory will also indicate the child's general approach to the task of reading (e.g. hasty and careless, hesitant and unwilling to risk a guess, etc.). Accuracy in reading the graded passages should be 95 per cent if the material is to be read independently by the child, and 90 per cent for material to be used for instructional purposes. Material with an error rate of 15 per cent or more is considered to be at frustration level (too difficult).

Over to you: Informal reading inventory

Prepare an informal reading inventory using photocopied passages from appropriate books in your classroom. The material should be carefully graded, beginning at the level of very simple vocabulary and short sentences in passages approximately fifty words in length. Extend this to more complex and demanding material in 150-200 words samples. Prepare six passages and use the inventory with a selected child. Evaluate the results in detail, indicating what the child can and cannot do in terms of word recognition, use of context, self-correction, etc.

The book *Watching Children Read and Write* (Kemp 1987) provides excellent advice and practical guidance for carrying out and analysing running records.

Level 1: Assessing the non-reader

If an individual, regardless of age, appears to be a non-reader it is worth obtaining the following information:

- Can the learner concentrate upon a learning task and attend to the teacher, or is he or she too preoccupied, distractible or hyperactive?
- Has the learner had adequate language experience (particularly listening to stories in the preschool years), and sufficient oral vocabulary development to begin reading?
- Is the learner capable of carrying out visual discrimination and matching of pictures, and letters and words?
- Has the learner developed adequate phonemic awareness to attend to the subtleties of speech sounds within words? (See also 'Auditory skills' in this chapter.)
- Does the learner understand what 'reading' involves? (Ask, 'What do we *do* when we read to someone? If you

had to teach a friend to read what would you tell them to do? How do we read?').

- Does the learner understand 'word concept'—that words are separate units in print, and that the spaces between words have some significance?
- Does the learner have the concepts of a 'sound', and a 'letter'?
- Does the learner have an awareness of the left-to-right progression in a printed sentence?
- Does the learner recognize any words by sight? (e.g. own name; environmental signs such as 'CLOSED' or 'KEEP OUT').
- Can the learner complete picture-to-word matching activities correctly after a brief period of instruction?
- Can the learner carry out a simple learning task involving sight recognition of three words taught from flashcards without picture clues (e.g. 'MY', 'KEY' and 'BOOK')?
- Does the child know the names or sounds of any letters when these are presented in printed form?

Marie Clay's (1985) book, *The Early Detection of Reading Difficulties*, is very useful for appraising a child's concepts about print, and his or her understanding of the reading task. Her assessment procedures cover several of the factors listed above. Also of value is the *LARR Test of Emergent Literacy* (Downing, Schaefer and Ayers 1993).

Level 2: Assessment above beginner level

For the child who is not a complete non-reading and has at least some functional skills, the following areas are worthy of assessment:

Basic sight vocabulary What can the child already do in terms of instant recognition of the most commonly occurring words in print? The Dolch Vocabulary List, the Key Words to Literacy List or the lists in the book *Reading Rescue* (Gillet and Bernard 1989) all provide appropriate material for this area of assessment.

Misuses and use of context When the child is reading aloud from age-appropriate material what types of error are made? Do the words conform to the meaning of the sentence or are they totally out of keeping with the message? Does the child tend to self-correct when errors are made in order to restore meaning? (See Kemp 1987.)

Word-attack skills When reading aloud does the child attempt to sound out and build an unfamiliar word, even without being instructed to do so? If not, can the child do this when he or she is encouraged to try. Has the child developed a fully functional set of phonic skills? In particular, does the child know all the common single letter sounds, digraphs, blends, prefixes and suffixes? Can the child divide a regular but lengthy word into its component syllables?

Auditory skills Can the child discriminate between similar but not identical speech sounds when these are presented orally in word-pairs (e.g. MOUSE—MOUTH, CAT—CAP, MONEY—MONKEY). Teachers can devise their own word lists for this purpose.

Can the child analyse and segment familiar words into their component sounds? This is a listening and oral test, not a reading test. If the child hears the word 'REMEMBER' can he or she break this into the unit RE-MEMBER? If testing this, you must first give some practice so that the child understands what is required.

Can the child blend or synthesize sounds in order to pronounce a given (e.g. CR-I-SP). Again, this is a listening test

and not a reading test; the child does not see the word in print. The following diagnostic test is useful for assessment of this skill.

Instructions

Say: 'I am going to say some words very slowly so that you can hear each sound. I want you to tell me what the word is. If I say "I-N" you say "IN". Sound the phonemes at rate of about one each second. Discontinue after five consecutive failures.

The words

i-f	g-o-t	sh-o-p	c-r-u-s-t
a-t	m-e-n	s-t-e-p	b-l-a-ck
u-p	b-e-d	l-o-s-t	f-l-a-sh
o-n	c-a-t	j-u-m-p	c-l-o-ck
a-m	d-i-g	t-r-u-ck	s-p-i-ll

Auditory discrimination, auditory analysis (segmentation), and phoneme blending are now regarded as parts of a more general metalinguistic ability terms 'phonological awareness' (Sawyer and Fox 1991). It is claimed that phonological knowledge is essential for beginning readers if they are to learn the orthographic code, and that specific training in such skills as rhyming, alliteration, segmentation, blending, and isolation of sounds within words results in improvement in early reading and spelling (Vandervelden and Siegel 1995; Ayers 1995; Frost and Emery 1996).

Comprehension

Reading can hardly be called true reading unless children are understanding the meaning behind the print, therefore evaluation of this key aspect of performance is crucial. Informal questions can be asked after a child has read a passage silently or aloud. The questions should not be solely

at a factual-recall level (literal comprehension), e.g. 'How old is the girl in the story?'; 'What is the boy's name?'; but should probe for understanding at higher levels of inference and critical interpretation. (e.g. 'Why did the man act in that way? Was he angry or shocked?'; 'When the lady suggested they look for the goods in another shop was she being helpful or rude?'; 'What do *you* think of the suggestion of the team makes?').

Exercises using 'cloze procedure' are sometimes useful in both testing and developing comprehension and contextual cueing. A passage of some 100 to 150 words is selected and every fifth or sixth word (approximately) is deleted leaving a gap. Can the child read the passage and provide a word in each case which conforms to the meaning of the passage and the grammatical structure of the sentence?

A particularly valuable instrument for the evaluation of reading rate, accuracy and comprehension is M.D. Neale's *Analysis of Reading Ability* (1988, 1989). The test also allows for appraisal of the student's auditory skills in discrimination, blending and simple spelling. An analysis sheet is provided to facilitate the recording and classification of errors.

Level 3: Assessing the child who has reached a reading plateau

Some children appear to reach a temporary plateau in their reading development at or about a reading age of 8 to 9 years. Many of the assessment techniques covered in the previous section may help to uncover the possible areas of difficulty in these children. The following procedures are also helpful at this level.

Error analysis

It is with children who have reached a reading plateau that error analysis can be extremely valuable in pinpointing specific gaps in the child's current reading skills. Possibly the

child has not yet mastered certain letter clusters as phonic sight habits, and will either make random guesses or will refuse or mispronounce unfamiliar words containing these letter clusters.

To employ the error analysis procedure it is usual to listen to the child read aloud on several different occasions using material which is reasonably challenging but not at frustration level. The performance is recorded on tape for later analysis.

Kemp (1987) suggests that errors can be recorded on a running record sheet, and classified as: self-correction (SC); appeal for help (A); teacher intervention (TTA if the child is told to 'try that again'; or T for 'told' if the word is supplied by the teacher); substitutions (S—the substituted word is written above the text word); omissions (line drawn above the word omitted); repetition (underline word each time the child repeats it). Attempts at decoding a word should also be recorded in terms of phonemes and syllables. Kemp's procedure also allows for quantitative evaluations to be made leading to the calculation of error rate, self-correction rate and dependency rate. These measures can be used to compare a student's performance before and after an intervention programme.

Rendability of the text

Consider the difficulty level of the material the child is attempting to read. Has he or she selected books which are at frustration level? Reading skills will not advance if the child is constantly faced with text which is too difficult.

The simplest check is to apply the 'Five finger test'. Take a passage of approximately 100 words and ask the child to read aloud. Each time an error is made you fold one finger into the palm of your hand. If you run out of fingers before the student reaches the end of the passage, the material is too difficult for independent reading (error rate more than 5 per cent).

These are several other more technical procedures which have been used over the years to calculate approximate readability level of texts. One system involves the following steps, using a sample of thirty sentences:

- count thirty sentences;
- count a number of words with 3 or more syllables in those sentences;
- calculate the nearest square root of that number;
- add a constant of 3 to your answer;
- the result obtained represents the school year level at which the material would usually be read successfully.

For example, if there are fifty-four words with three or more syllables, the nearest square root is seven. Add three, which gives ten. The material is typical of school Year 10 and could be read successfully by the average student of that age level.

However, readability level is determined by more than the number of multisyllabic words. The ease with which a text is read is also related to the reader's familiarity with the topic, the complexity of the syntax used and the sentence length. Even the size of the print and format of the pages can influence readability, especially for students with learning difficulties. The most useful index of readability is a student's actual performance on the text.

When selecting texts for students to read teachers should consider the following points:

- Is the topic within the experience of the students?
- Is it meaningful and relevant?
- Is the book itself attractive and appealing?

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- Is the language used in the text natural and easy to predict? Are there many unfamiliar words? Are the sentences complex? Are the sentences stilted (as they often are in early reading books)?
- Are there many useful contextual and pictorial clues?
- Will this type of text expand the student's experience of different forms of writing for different purposes?

Affective factors

With a student who has ceased to make progress it is vitally important to consider affective as well as cognitive factors. For example, has the student developed a very negative, 'couldn't-care-less' attitude toward reading avoiding the task whenever possible? Does the student experience any enjoyment from reading? Is the material in the book keeping with the student's real interests? Is the working relationship between the student and the teacher (or tutor) a positive one? Is there any incentive to improve? Where difficulties are detected in these areas it is just as important to attempt to change matters, if possible, as it is to concentrate merely on the skills aspect of reading development.

The handbook prepared by Johns (1986) contains some useful questionnaires, inventories and scales for the appraisal of affective and attitudinal factors. Also of value is the *Reader's Self-perception Scale* designed by Henk and Melnick (1995).

When setting performance objectives in the affective domain it is usually necessary to specify particular indicators which will signify changes in such areas as motivation, attitudes or values. For example: 'Jason will show improvement in his attitude toward reading by an increased willingness to (i) borrow books from the class library (ii) take books home to read (iii) discuss the books he has read (iv) stay on task for longer during periods of reading'; 'Lucy will demonstrate increased confidence in her oral reading performance by volunteering more frequently to read aloud in class.'

Over to you: Informal assessment of reading skills

Assemble appropriate materials for use in assessing a student's current abilities in the following areas:

- phonological awareness;
- sight recognition of commonly occurring words;
- phonic knowledge;
- word-attack skills;
- comprehension.

Use the materials with a student and seek answers to the four key questions presented earlier in the chapter.

Summary

All the assessment procedures described in this chapter are applicable to students with very varied forms of physical, sensory or intellectual disability. A particular disability does not require a specific and unique form of diagnostic evaluation; one is simply attempting to find out with some degree of precision what the student can and cannot do at the present time in this skill area. It may well be that the student with the more severe form of disability, or with multiple disabilities, will be assessed in the readiness-type skills typical of a much younger child, but the actual procedure involved in assessment does not differ.

According to how the student performs on the initial diagnostic assessment a teacher would either focus on the early or prereading skills (e.g. sentence building, word-to-picture matching, letter knowledge, etc.), on intermediate skills such as word-attack, contextual cueing, etc., or higher-order reading skills such as prediction and literal, interpretive or critical levels of comprehension. Activities will then be programmed to assist the student to develop beyond the present stage. The next chapter provides a description of a number of methods which may be employed to assist students

with reading difficulties, regardless of the cause of such difficulties. Most of these methods can be used within the regular classroom and do not require the students to be withdrawn for remedial assistance.

DISCUSSION POINT

Imagine that you are appointed to a school where no systematic check is made of children's reading progress at any age level.

You are asked by the head teacher to devise some appropriate system for assessing the overall reading attainment in the school for identifying those children in need of special assistance.

After considerable time and effort you plan what seems to be a viable set of procedures and you present your plans at a staff meeting.

Much to your surprise several of your colleagues object very strongly to your suggestions, stating that they do not believe in testing children in any formal way. They say that tests don't tell them anything they don't already know. They also imply that testing makes children anxious; and when parents get to know their children's results this can cause a great deal of unnecessary concern in some cases.

What are you going to do?

One obvious action would be to withdraw your plan and give in to your colleagues' arguments. However, you feel quite strongly that some monitoring of reading progress is necessary and you are prepared to argue your case.

Try to summarize the points you would make to support your suggested programme. Try also to answer the specific objections raised by your colleagues.

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2

NEED FOR COMMUNITY SERVICES FOR THE MENTALLY HANDICAPPED

The development of community services for the mentally retarded has generally proceeded slowly in the United States.

A Description of Bronx Developmental Services (BDS)

The core of BDS's services and operation are its Community Services Teams, whose offices are geographically distributed in the various parts of the Bronx. Four Community Services Teams currently exist, one each in the northeast, southeast, west, and south Bronx. BDS eventually intends to have a Community Services Team serving each of the six comprehensive health planning districts of the Bronx. Each district has a population of approximately 250,000. The Teams function in a relatively autonomous fashion, but are supervised by a Chief of Community Services. Each Team is developing its own consumer and community advisory board. The Teams consist of social workers, nurses, a psychologist, special educators, or other professionals and paraprofessionals (Table 2.1) who know the resources in the borough and have established contact with other organizations and individuals working with the developmentally disabled. Each team acts as a resource and referral service, provides crisis intervention, helps to arrange for homemakers, family care, and residential care, and for pre-school, school, workshop, recreation, and hostel programmes. In addition, each team is either operating or planning a direct service programme out of its community

office. The initial philosophy of the teams was to utilize existing services for the disabled whenever possible, while providing consultation, support, and advocacy services. They now also provide direct services when the skills needed to operate a new programme are otherwise unavailable in the community or no one else can be found to provide the needed services. An example is in the rehabilitation of physically handicapped mentally retarded children and adults where few agencies have the expertise or interest in providing direct services, so that BDS, with its medical school affiliation, has directly developed new programmes in this important area. In situations in which existing agency assumes primary responsibility for a client's care, BDS continues to maintain a liaison with most clients and their families, since our expertise and consultative skills are often necessary to assist in sustaining the client and to act as an advocate in the community. All clients resettled from institutions continue to be followed by BDS staff.

The full scope of the activities of the community services teams are illustrated in Figure 2.1.

Table 2.1. Staff of community services team

Team leader
Psychologist
Social workers
Community mental retardation nurse
Special educators—child and adult
Nursing home consultant
Community workers and paraprofessionals
Part-time:
Occupational therapist
Physical therapist
Vocational counsellor
Secretaries
Consultants:
Medical specialists
including
psychiatrist and physiatrist
Other chiefs of services
(psychology, social work, etc.)
Speech therapist

ACTIVITIES OF A COMMUNITY SERVICES TEAM

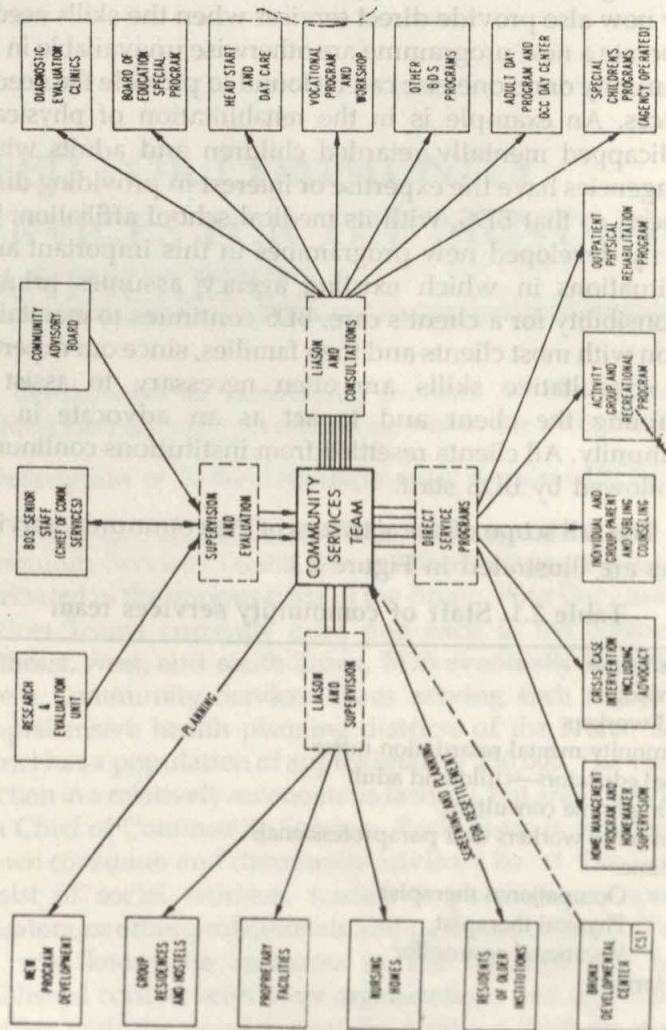


Fig. 2.1 The role and functions of community service teams.

An important function of the Community Service Teams is to help community agencies develop habilitation, educational, and residential programmes. The teams provide advice and staff training for existing health care and social agencies while assisting them in whatever way possible in their work. Another obligation of the Community Service Teams has been the resettlement into the community of those residents of Willowbrook and other New York State Schools who originally resided in the Bronx. Team members have participated in the screening of current residents in the State Schools and, where they exist and can be located, established contact with the families of these clients. In the past 30 months, the teams have arranged for resettlement of about 182 people from State Schools, including 157 from Willowbrook, and the teams now monitor the care and services that resettled clients are receiving.

BDS, in addition to the teams, has staff situated at seven other locations in the Bronx where space is borrowed or shared with community or State agencies. Special treatment programmes directly operated by BDS, or in conjunction with a community agency, include a 12-bed in-patient Short Term Intervention Treatment Unit for behaviour modification of severely retarded children, a Home Management Unit, a Family Care Programme, an Adolescent Treatment Service, Parent-Child Education Day Programmes, an Adult Multi-disciplinary Diagnostic Clinic, and a day programme for severely retarded adults.

The opportunity to develop and provide these decentralized community services and direct treatment programmes was enhanced by the specific local situation. If BDS had been located in a community in which there was an existing large residential institution for the retarded or other easily available centralized space, both political and fiscal pressures would have inhibited the implementation of a plan for decentralized services. Furthermore, a completed building would have evoked pressures to provide classical institutional

type of care rather than community oriented programming of the type that has been described.

Difficulties Encountered in Developing Community Services

Fiscal Difficulties

A critical factor affecting the ability to plan and deliver effective services is the amount of funds allocated for that purpose. Unfortunately, until recently, budgeting for mental retardation services at a State governmental level has been primarily based on allocations of funds to residential institutions. This has been almost entirely tied to a formula for the costs per patient served in a bed. In New York State, institutional services have been funded on a 100% basis. On the other hand, limited State aid funds for local or outpatient programming are available via a formula requiring that State aid is matched by local support on a dollar for dollar basis.

Conversion to a system of services, based on the concept of providing a diversity of services to the developmentally disabled within their community, has been a painfully slow process. Part of the problem is related to the apparent conservatism of State control agencies. Budgetary staff are familiar with and used to allocating funds and dealing with costs of traditional institutional care, including staffing ratios and indirect (other than personnel services) costs, since these are both components of the standard hospital-medical model. Auditors can control costs in a known model and can clearly identify discrepancies. In this situation, Civil Servants can apply existing patterns of staffing and enforce adherence to prior, usually inflexible, standards. On the other hand, community services currently appear too open ended to control agencies. The costs are uncertain, the staffing requirements vary, prior experience of fiscal control based on a hospital model is of little use, the charting of staff utilization and activities is more complicated, and the patient statistics are confusing. For example, when promoting the concept, the

staffing and the role of the Community Services Teams, we have had difficulty with State fiscal control agencies on issues such as: 1) the size of the catchment area that a staff team should cover, 2) the number of staff needed to serve a population base, 3) the type of staff requested for a community services operation, 4) the need for flexibility in hiring to enable recruitment of indigenous staff, to expand the use of paraprofessionals and to develop new career opportunities, 5) utilization of staff in new roles, as advocates, consultants and advisors rather than primary care delivers, 6) the problem of record keeping and statistics on a decentralized basis. It is particularly difficult to account for time spent on indirect services, team meetings, meetings with agencies, telephone calls, assisting clients at social security offices, etc., 7) in trying to staff an intensive behaviour modification programme for severely retarded children, it has been difficult to convince the control agency that a higher staff to client ratio is needed to develop an effective programme, than for caretaker or custodial services, 8) it is difficult to convince the authorities that an isolated programme location justifies authorization of a senior clerical and secretarial position, when these positions have previously always been allocated by civil service on the basis of whom the person works for rather than on the basis of functions performed, 9) in addition to these staffing or personnel problems, the difficulties in obtaining space, providing transportation, and supplying equipment are a logistical nightmare, since the separate actions of all of the State control agencies usually result in staff recruitment, space allocation, or rental and equipment purchasing being thrown completely out of synchrony, 10) another serious obstacle is the complex bureaucratic procedure which impedes arrangements to rent space in the community. This is despite the Joint Commission on Accreditation of Hospitals (JCAH) Standards for Community Mental Retardation Programs (1973), which recommends that space be located in the midst of the community that the programme is intended to serve.

Central Office budget and programme administrators do not yet seem to be aware of the need to decentralize programming to serve local needs. This is an additional example of the undesirable effects of arbitrary decisions made at points far distant from the programme provider.

The lack of understanding of community services by State Fiscal authorities, as well as misplaced priorities, has caused grave problems with community oriented programmes. For example, expansion plans for BDS were eliminated from the Governor's final budget proposal in each of the past 3 years. The reason, as verified by official letter, was that we had no new beds to operate and, therefore, presumably did not need new funds. Our eventual staff expansion came through reallocations within the Department of Mental Hygiene with staff being reassigned to BDS based on our plans to resettle a specific number of former institutional residents. Thus, even the latter arrangements still excluded any consideration by senior officials of the needs of the mentally retarded clients now in the community who are not now receiving needed services.

Competition for limited resources by competing special interest groups within the mental retardation field presents major obstacles. Allocations based on revenue sharing rarely seem to find their way directly into categorical programmes for the developmentally disabled. Tax levy funds for new programmes are becoming scarcer as the voluntary, privately raised dollars. Then, there is the bane of programme developer's existence: matching formulae requiring local dollars, which are in diminishing supply, to provide a dollar for dollar match for State or federal governmental allocations.

One of the ways we have tried to deal with the budgetary problem has been to lobby actively via calls, mail, and by contacting people until we get what we ask for. Another method has been to mobilize consumer groups, public

opinion, and local legislators. Unfortunately, it has been disappointing to observe how powerless the latter have been to alter the stance of the executive branch of State government.

Attempts to educate the control agencies in the executive branch have, thus far, been of limited benefit. This seems to be due to a conscious attempt on their part to remain aloof in order to be objective. An example of this is the fact that the budget staff assigned to Mental Hygiene in the executive branch of government are rotated every 3 years, with the apparent intent of discouraging budget analysts from becoming too identified with a Departmental programme and, thereby, being in danger of showing favouritism. Of course, if the cost effectiveness of new programmes could be clearly demonstrated, then this would be an effective means of educating control agency staff. However, demonstrating cost effectiveness in a human services operation is a most difficult task and may not even be a reasonable or appropriate one.

In order to make certain that the developmentally disabled get their share of needed governmental funds, it is clear that the best insurance is the earmarking of funds for that purpose with matching formulae eliminated.

Finally, when all else fails, as it often has, we have been forced to: Assign staff to activities and in locations for which they were not originally allocated, juggle staffing patterns, make informal shared services arrangements, both internally and with outside agencies, and, generally, do whatever appears best for client services and care that seems prudent.

Bureaucratic Difficulties

One of the major problems BDS has encountered is the impression that many state officials appear more concerned about "the system" than the clients that the system is intended to serve. The Civil Service system, while useful as a merit system, often appears as an instrument to prevent change. In

the programme area, new proposals seem to face irrational and "penny wise and pound foolish" decisions by bureaucrats who claim to be "protecting the tax payer's dollar." Plans for custodial care seem to encounter few delays, while plans for preventive services face interminable delays in being initiated.

Decisions in the bureaucracy are often made by decision makers who are far from the point of delivery. A case in point is that despite our carefully formulated budget and staffing proposals, we were never consulted, spoken to, or visited when specific cuts were made or when priorities were altered, based on political or other unspecified considerations. Then, when programmes were finally at the point of implementation in the community, the process of approval of staffing, equipment, locations, or agreements on sharing responsibility with agencies are delayed weeks and months by state paperwork procedures.

One practical recommendation for overcoming these bureaucratic obstacles would be to provide remote bureaucrats with firing line experience, both before their central office assignments and on a rotating basis while they are in their jobs, in order to broaden their perspectives and range of experience. Ideally, decision making should be decentralized as much as possible without creating additional layers of bureaucracy, while maintaining carefully controlled, but not stifling, procedures assuring accountability. There should be an expeditor whose sole responsibility is to identify the obstacles and to follow up on or push programme plans forward. the system should be kept flexible so that new ideas and proposals can be introduced and, perhaps, be given a clinical trial. Such trials should be accompanied by evaluations involving techniques to assess client acceptability, cost effectiveness, and staff productivity and morale.

Problems with Consumer Participation

It is natural and desirable in a community programme

to actively encourage consumer participation in service development and decision making. Consumers and the community have a right to participate in making decisions and formulating policies which affect themselves and their families. This view has led community-oriented programmes such as BDS to plan for the gradual development of a community advisory board and for consumer participation on policy making committees. In our case, the consumer advisory board was intended to be representative of all programme components of BDS, all sub-regions of the Bronx, and all ethnic groups.

Unfortunately, this objective has encountered serious difficulties. Foremost is the basic ambivalence of both consumers and professionals. Both feel that those in authority possess skill and expertise that the public is not equipped to evaluate or regulate. This "medical model" views the consumer as a patient to whom help is given and who cannot "prescribe" for himself. This reasoning is often applied to both service and administrative judgements. The professional is often threatened by parents projected into decision-making positions on policy-making boards, while the parent or client often prefers to be placed in a passive role of being given treatment. Here are some examples of how the ambivalence on both sides has caused considerable problems. When the consumer advisory board of BDS was being planned, considerable difficulty was encountered recruiting parents representative of all sections and ethnic groups in the Bronx. It was predominantly middle class parents who came to the meeting. Old timers discouraged newcomers with tales of past failures and lack of progress when they lobbied to help the developmentally disabled. The consumers who showed up at all community meetings to express their own views were often not representative and tended to dominate the meetings. Language barriers inhibited Spanish-speaking clients from participating.

When the consumer advisory board started developing its bylaws, they stated a desire for final decision-making

power over policy, hiring, and firing. The Director then indicated that he was legally responsible for programme decisions and, therefore, must have final authority. In doing so, he stressed the advisory role of consumers and how a consensus should be obtained about important decisions. The Director also pointed out the Civil Service regulations which control hiring and firing and which must be adhered to by BDS. Then, apparently as the result of frustrations that the parents seemed to feel when confronted by the regulatory procedures, the parents expressed feelings of distrust towards the professionals who were planning services for their children. This occurred at the same time that the parents were asking the professionals for new types of services which the parents had difficulty defining.

As the process of forming the consumer advisory board continued, senior professional staff began to show anxiety about its creation and possible powers. One particularly difficult problem was the anger expressed by certain parents aimed at individual professionals who provided specific programmes. Examples of such conflicts were: 1) when short term residential or intensive treatment was offered by staff, but long term residential programming was the primary goal of the specific parent or family, 2) when the staff felt that a child was no longer appropriate for a programme and the parents were approached about a referral to another programme, the child's parents vocalized their hostility, 3) some parents disliked parent group counselling, while other parents lobbied for more group counselling, 4) parental overprotectiveness obstructed programme participation for certain retarded children, keeping these children from attending more advanced programmes for which they were clearly qualified.

Although all parents who attended meetings were encouraged to participate and make their views known, most preferred to remain quiet. It appeared that a few more

aggressive or angry parents, were the dominant participants at meetings. Few parents were able to generalize from their own specific problem to the larger problem of the whole community.

There is a serious problem in enlisting community support for programs for the developmentally disabled, since many people have major priorities, including unemployment, poor housing, and overwhelming poverty. It is hard, under the circumstances, for consumers or professionals to raise the visibility of mental retardation as an important issue at community meetings.

Conflict arises when staff assume an advocacy role for the disabled client and believe that the parental preference for institutional placement is not in the client's best interest. When staff decide it is preferable to maintain a particular client in the community rather than arrange placement in an older overcrowded institution, the staff's position may be in direct opposition to the parent's wishes. The legal rights of the disabled person, the related guardianship issue, and the State's role in this regard are still not very clear, although as a guiding principal, the courts have stated in *Wyatt vs. Stickney* (Civil Action No. 72 2634 M.D. Ala. 1972) that "the mentally retarded person is entitled to the least restrictive setting necessary for rehabilitation."

To work out some of these difficulties, we are attempting to form an alliance and collaborative relationship with concerned interested consumer and community groups, and are evolving a policy for joint decision making through consumer participation in BDS policy and planning committees. Furthermore, programme evaluation will be jointly performed by consumers and professionals. We are establishing a mechanism to assist parents and consumer groups in providing legal assistance for clients and their families when needed. Finally, since it is hoped that better informed consumers and public officials will be more effective collaborators with

involved professionals, we have embarked on a serious effort in consumer and community education via radio and T.V. programmes, posters, speaking engagements, and workshops, including special presentations to public officials, court personnel, and clergy.

Despite the effort to encourage consumer participation in planning and programme development and the efforts BDS has made in community education, there are basic unresolved questions which cause concern and reservations among community service planners. The concerns include whether consumer participation, or even control, is as helpful in creating better programmes as it appears to be in lobbying for needed services. Is joint decision making too cumbersome? Too time consuming? How much will conflicts of interest interfere with consumers' participation in deciding global issues? How productive are community education efforts? Since there are few data to answer any of these questions, creative thinking and extensive research will be needed to attempt to resolve these issues.

Philosophical and Attitudinal Obstacles

An obstacle impeding service development and delivery is the stereotypes some hold about the mentally retarded. The general belief of many is that "nothing can really be done" to help the retarded. Fear and ignorance are prevalent.

Health Professionals

Attitudes held by different medical specialists vary. For example, pediatricians are trained primarily to care for the acutely ill. Although they commiserate with the plight of the handicapped, as Cooke (1966) and Burg and Wright (1972) have reported, pediatricians often feel that they have a low level of competence to handle the problems of the chronically ill and would rather not treat these patients. In addition, their experience and training as counsellors are rather limited.

Among obstetricians, a common reaction encountered is to advise the family immediately to institutionalize the child, regardless of whether this is wise, appropriate, or even feasible. Many psychiatrists appear to avoid becoming involved in therapeutic relationships with physically handicapped, brain damaged, or retarded patients and this is reflected by the very limited literature concerning psychiatric treatment of such patients. Yet psychiatrists in many states still exercise political and fiscal control over mental retardation, as a branch or a subsidiary of mental health.

Nurses usually have little exposure to mental retardation in their training and curriculum. However, in our experience, nurses can play a major role in delivery of services to the retarded. While mental health nursing has long been considered a recognized subspecialty, it is only in recent years that mental retardation nursing is gaining any recognition either inside or outside of institutions.

In general, medical centres appear to have "ivory tower" attitudes in that they are willing to do research or study the retarded, but will usually not assume service responsibilities or initiate outreach service programmes for these patients. As Rosen and Callan (1972) have reported, only a small number of institutional programmes for the retarded have formal university affiliations that affect programmes or training, while community programmes have an even lower frequency of university ties. These observations contrast with biological researchers' past proclivity for using institutionalized retarded subjects in research studies.

Many health professionals have had rigid attitudes which tended to reinforce the concept that successfully to serve the handicapped, job qualifications and professional degrees are more valuable than life experiences. In addition, the problem of finding staff who have had previous experience in the mental retardation field has made staff recruitment

difficult. This is, in part, the consequence of the failure of many training programmes for health professionals to spell out their objectives. When they have, those objectives are usually too general. For example, we may train social workers to be case workers or psychologists to be psychometricians, but we do not adequately prepare these professionals for roles in community mental retardation programmes, residential settings, and specific programme areas where more goal-directed training would assist them in their later functioning. The lack of such training has forced new programmes such as ours to provide extensive on-the-job and in-service training for most new professional employees. To deal with the problems of the insensitivity, or ignorance of many service providers, including health professionals, it is clear that more and better training is needed to develop the kinds of interviewing, counselling, and related skills and knowledge that are required to work more satisfactorily with and help the developmentally handicapped. With regard to rigidity in job classifications, the use of multi-disciplinary team approaches, although not always commodious or efficient, tends to break down some of the rigidities of the more traditionally trained professionals. In addition, use of more paraprofessionals and lay personnel should be encouraged.

Teachers

Teachers have little or no training in special education as part of their regular curriculum. It is, therefore, not unexpected that they are fearful of integrating mentally handicapped children into their programmes. Furthermore, special educators emphasize training programmes to accommodate the needs of the more mildly learning-disable and educable retarded children and often neglect the problems and needs of the severely retarded and multiply handicapped. The latter groups were for a long time regarded as primarily having medical problems and their care regarded as a medical responsibility.

As developmentally disabled children of all types are increasingly integrated into community schools, it is essential that educators familiarize themselves with the problems of handicapped children. Furthermore, the thrust of training for new special educators must be on expanding their range of skills to enable them better to deal with more severely disabled children. This involves learning methods such as behaviour modification and working with parents to encourage carry over of school experiences into the home. It also means developing early educational intervention techniques with preschool handicapped children. Greater attention must also be given to vocational training programmes.

A progressive approach to the educational needs of the retarded is to emphasize the value of investing in services now and intervening with treatment as early as possible in order to translate the early intervention into long range benefits. Early and more intensive treatment may reduce unnecessary dependency, social difficulties and, in some cases, avert permanent residential placement. As Conley (1973) has reported, investments in vocational training have certainly demonstrated long range cost savings in terms of the productivity of the individuals who have received the necessary training and support services.

The approach of BDS to educators has been to offer workshops and training sessions for both special educators and teachers with limited special education backgrounds. The Community Service teams and special programme staff have, when feasible, established close relationships with preschool programmes such as head start and day care centres to assist relatively untrained staff to include handicapped children in their programmes. BDS has provided back-up services both inside and outside of the schools. In some cases, programmes are jointly sponsored by the N.Y. City Board of Education and BDS, and in other cases, one or the other agency with appropriate liaison between the staffs. Training for teachers is an essential component of all such programmes.

Legislators

A number of issues related to mental retardation cause difficulties for legislators. In a situation where responsibility for mental retardation services is subsumed under the label "mental health," legislators naturally tend to lump the two groups together in their thinking. Thus, institutions for the mentally ill are assumed to be programatically similar to those for the mentally retarded. Problems of aftercare and community placement are assumed to be similar and community reactions to and fear of the mentally ill are assumed by politically sensitive legislators to apply equally to those of the mentally retarded. This encourages a "lock them up and keep them off the streets" attitude. It is clear that legislators have not received accurate information about mental retardation and, particularly, about the current movement toward community mental retardation services.

In attempting to educate legislators on these issues, public and voluntary agencies have sponsored legislative forums. Public agencies such as BDS are limited in their ability to lobby for their objectives and views. However, a militant and informed consumer advisory board, led by parents who seek services for their children, can be an effective voice at public hearings that legislators attend.

Parent's Groups

Over the years, the parents and relatives of the retarded have developed into an important lobby for better services for the retarded. In states such as New York, leading parent-sponsored organizations have aggressively advocated direct consumer control and operation of services. Even when a recent series of court rulings ordered local Boards of Education to pay for all of the educational costs for children now being served by parent-sponsored agencies, the reaction of parent's groups was ambivalent, since they were concerned about diminishing their role as direct providers. The issue of control

of educational activities or fear of job loss by some agency workers appeared for some to be more important than the opportunity to divert "hard to raise" dollars, now used for primary education services (which the government should and now agrees to pay for), into the development of needed supplementary recreational programmes, social activities, parent counselling groups, etc.

In dealing with these difficult problems it is essential to build trust between consumers and professionals. Opportunities for joint planning for common objectives seem to foster collaboration and trust. Openness on the part of professionals is also useful. A community-oriented programme such as BDS sees no contradiction in consumers operating their own programmes provided the programmes are effective, well run, and do not duplicate existing services. Another reasonable way of promoting better professional and consumer understanding is through the mechanism of establishing procedures for the joint evaluation of the effectiveness of services and "normalization" experiences for the handicapped. The results of these studies would enable us to plan more realistically and collaboratively in the future.

Minority and Other Community Groups

The development and maintenance of services for the mentally retarded is not a priority for most community groups. Some ethnic and racial minority groups in relatively poor communities appear to prefer not having their children classified as being mentally retarded unless the retardation is severe. Most community leaders appear to be unaware of the extent of the broader problem of developmental disability in their own geographic area.

Another problem is the skepticism of the minority groups members because of what they view as the unfulfilled promises that have been made to them by governmental and voluntary agencies as well as community mental health

groups who encouraged community participation and then reacted defensively when control become the central issue. Their anger at governmental institutions, in general, inhibits attempts at cooperative and collaborative arrangements.

The pragmatic way we are trying to deal with these feelings is by establishing a visible presence in the community including those areas dominated by minority groups. The Community Service Teams operating in these areas are staffed largely by indigenous professionals and paraprofessionals who come from similar minority backgrounds. Some belong to local families who have retarded children. These staff assist local agencies in developing their own programmes. Staff attempt to educate the local community by whatever forums exist, and then assist the local groups to provide needed services. Whenever possible, local people are selected for jobs and trained to work in mental retardation programmes.

The Media

Few radio and television programmes accurately portray the plight of the mentally handicapped, particularly of the more severely disabled. The media appear primarily to describe the extremes, namely the mildly retarded who have an optimistic prognosis or the profoundly retarded who are abandoned in abhorrent circumstances. The latter group make cogent and profitable journalistic material for expose purposes. This approach may be effective in lobbying for improved programmes, but it can also engender attitudes of hopelessness and the image of incurability for all of the retarded. On the other hand, a pre-occupation with happy ending and more palatable commercial fare can lead to distortion and misinterpretation on the public's part. It is obvious that the issue of mental subnormality and, particularly, severe mental subnormality must be given more prominence. We need more research, however, to tell us what the most fruitful mechanism for this may be.

Overlapping Jurisdictions

Planning Responsibilities

An issue of considerable importance in developing new services in the community is defining the responsibilities and interrelationships of the various agencies who serve the mentally retarded as a result of a legal mandate or a voluntary effort.

The role of BDS, a new state agency to serve the mentally retarded, has been the subject of considerable debate. No guidelines for community-oriented state programmes existed in the past. The leaders and staff of BDS constructed their role to be not only as an agent to channel State funds into new programmes, but also as coordinators and advocates to mobilize all available resources in the country to help develop services for mentally retarded and developmentally disabled Bronx citizens. As a result of these efforts, BDS has been involved with other agencies, both public and voluntary, in a process of clarifying whose role it is to provide specific types of services. This issue has significant political ramifications, since it tends to aggravate existing controversies and fiscal entanglements between City, State, and voluntary agencies. Examples of these types of difficulties that are frequently encountered involve responsibilities for social welfare, education, health services, and transportation.

Social Services

Local social service agencies are required by law to provide payments for medical care and for the maintenance of all eligible handicapped citizens, including the mentally retarded, in nursing homes and intermediate care facilities via Medicaid. Local communities are reimbursed by the Federal Government for 75% of these costs. Local social services officials resist certifying retarded people as being eligible for these facilities while claiming that the responsibility for the

cost of care for the retarded rests solely with the State Department of Mental Hygiene, which pays for 100% of the costs of the retarded in State Institutions. Community services staff, functioning as advocates, often must resort to legal pressure to make local Department of Social Services officials approve payments for the care of the retarded. Another example involves the Bureau of Child Welfare, a branch of the Department of Social Services (or Human Resources Agency as it is called in New York). Although this agency is required by law to accept guardianship responsibilities and assist or directly arrange for emergency placement for homeless or abandoned children, the agency often refuses to accept responsibility for guardianship and placement of retarded children who, due to a family crisis, need emergency alternative living arrangements. As a consequence, out of necessity, mental hygiene agencies, such as ourselves, have been forced to set up their own family care or foster care programmes for the retarded. At the same time, we have offered ourselves as consultants to the social welfare agency so that we can eventually assist a government agency to assume fully their legally mandated responsibilities in this area of child care. The guardianship issue is an excellent example of how, under appropriate circumstances, responsibilities can be delineated. When and if the social service agency assumes its responsibility as guardian of the retarded child, it is appropriate for that agency to act as an advocate and a monitor to assure that a stage agency, such as BDS, responsible for developing programmes for the retarded child, appropriately carries out its mandate. In fact, in N.Y. Family Court proceedings, BDS recently convinced a Judge to assign guardianship responsibility for a mongoloid child to the Bureau of Child Welfare (BCW), after BDS guaranteed that it would directly provide or arrange the appropriate treatment and educational programmes. Despite the Judge's acceptance of this plan, which placed the authority of the court squarely behind BCW in any effort they might have to make to assure

that BDS would keep its part of the bargain, BCW officials refused to accept this plan. BCW is currently appealing this ruling to a higher court. BDS has been assured by the N.Y. State Attorney General's office that BDS is legally correct in its assertions that the separation of responsibility for treatment from guardianship is a correct one and that the Mental Hygiene and the Social services or Welfare agencies respectively have distinct responsibilities in such cases.

Another important example of a problem with social service agencies is related to the new legislation for Supplemental Security Income. The new guidelines and payment procedures have created chaos for the mentally retarded, since the definition of who is eligible, in terms of degree of retardation, is unclear. The mechanisms for implementation of this new programme are also unclear and the resultant delays have slowed down the process of deinstitutionalization, since these payments were counted on to support part of the retarded clients expenses in the community. This has, again, caused conflict between community services staff, playing an advocacy role, and those administering the local Supplementary Security Income programme.

Education

Recent court rulings clearly indicate that the legal responsibility for educating the retarded unquestionably rests with the local education authority. Board of Education programmes have not, however, previously included many severely handicapped children and therefore, their teachers are usually not prepared to deal with these youngsters, despite the legal mandate. This has also been the case with Head Start and Day Care programmes, which have been ordered by federal authorities to integrate handicapped youngsters with normal children so that a minimum of 10% of their total programme population will be developmentally disabled youngsters. Implementation of this has caused tension between the advocates for the handicapped and

the programme providers. However, as a result of discussions between BDS with local education officials we have agreed to train teachers funded by the Board of Education who will then teach handicapped clients that we serve, while we also provide necessary back-up and support services. Once these roles and responsibilities, including the Board of Education's fiscal and programmatic commitments were clarified, we were then able to operate successful collaborative education and habitation programmes.

Health Services

In the area of health services, there has been a general lack of availability of medical services for the handicapped. This has been fostered by exclusionary policies. Families of retarded children and adults who come to medical or psychiatric emergency rooms frequently report that the retarded are mistreated and excluded from services that others receive. One of the often heard complaints among advocates and service providers for the mentally retarded is their inability to obtain psychiatric services, despite the fact that the control of mental retardation funding is in the hands of the Department of Mental Hygiene. BDS has engaged in delicate and sometimes frustrating negotiations with medical and psychiatric departments of local municipal hospitals, attempting to arrange needed care for retarded clients. In doing so, BDS stresses its role in liaison and providing follow-up, but not primary or acute health and psychiatric care for the retarded.

Transportation

One of the greatest barriers to effective programming for the mentally retarded and physically handicapped has been inadequate transportation. Although most urban communities have reasonably adequate public transportation, it does not meet the needs of those who are severely handicapped. The development of special transportation for the handicapped

has been inhibited by lack of funds and by difficulty in defining whether it is the responsibility of the Department of Mental Hygiene or the Department of Transportation and whether this should be a state, local, or agency-operated programme. The development of transportation for the handicapped has also been inhibited by attitudes, both on the parts of parents and professionals, toward increased travel for the handicapped. Some parents express fear of permitting their handicapped offspring to travel alone, citing the dangers of travel on urban public transport even for normal people. Compounding this fear is the tendency of some parents to overprotect their handicapped child. In many cases, this has never been effectively dealt with by the professional staff working with the family.

Among the solutions to the problems of transportation for the handicapped is early training in the use of public transport. This should be an essential component of all public education programmes for the retarded. Although it does not appear to be feasible to modify current public transportation to accommodate the needs of all retarded and physically handicapped people, it is still important to remove as many physical barriers as possible to enable the handicapped to utilize this mode of transport as often as possible. However, recognizing the limitations that would still exist, a single special transportation system would still be necessary for those who would otherwise be home bound. This could be developed as a public programme whereby anyone with a severe disability could call a central number and a special vehicle suited to accommodate physically handicapped people would be despatched to transport the person to his or her destination. This is the essence of some experimental "dial-a-ride" systems. Another possibility is that all agencies serving retarded and physically handicapped people pool their resources and form a consortium to develop an efficient centralized system within the community. Public mental

retardation agencies, such as BDS, must be willing to volunteer to coordinate such an effort.

Determining Priorities

The problem of setting priorities in a relatively underserved area such as the Bronx would ordinarily be a serious one. However, since the Bronx has always had strong diagnostic services for children, there was no need to set up a mechanism for additional case finding and assessment of developmentally disabled children. What was evident, as a result of the clinics' experiences, was the necessity for rapid development of day treatment programmes for severely retarded children, especially in poverty areas. In addition, there was an immediate desperate need for community residential services. These priorities and others became even clearer as a result of BDS's efforts to serve local community needs via visible community service teams and through an effort to coordinate its activities with other agencies. Formal coordination with other agencies has taken place through a Bronx Mental Retardation Regional Council. All provider agencies and consumer groups are invited to participate on the Council. With 30 or more members, the Council is too large a body to be effective in determining priorities. However, through subcommittees that deal with specific problems, such as residential care, adult programmes, children's day programme, etc., the Council voices its approval or disapproval of new proposals. But the subcommittees have not usually rated priorities within their specific area of interest, nor has the Council itself recorded its priorities among the various competing types of proposals.

Because of the Mental Retardation Council's and the participating agencies' failure to effectively set priorities and do joint planning, BDS pushed for the development of what we call an Implementation Committee. Difficult cases are brought to this committee on which all important provider

agencies are represented. This committee formulates a "treatment" plan or plan for needed services. By applying pressure from peers and colleagues, responsibility for implementation is assured. Although this type of collective decision making is cumbersome, it is useful in obtaining some consensus on the location of services gaps and who should try to fill them.

With information obtained from sources such as the implementation committee and from the types of problems confronted as a result of their own field experiences and agency referrals, BDS staff realized that first priority had to be crisis intervention for the handicapped individuals or their families who present serious social emergencies. BDS' second priority has been planning and arranging for the removal of former Bronx residents from large State institutions for the retarded and providing or developing programmes and more normal living accommodations for the people back in their community of origin. This process has commonly been called deinstitutionalization. This has been a very high priority for BDS because of the wretched state of the large public institutions and the pressures to diminish rapidly their size. Thirdly, as a result of our own and the referring agencies' assessment of the current needs in the Bronx, we have attempted to plug huge gaps in terms of available programmes. This led to the creation of our short term treatment unit, a 24-hour intensive treatment programme for severely retarded children. The crisis intervention activities also clearly pointed to a need for a multi-disciplinary diagnostic clinic for adults, since the existing clinics only served children. Other units that BDS has developed include a day programme for severely retarded adults, a home management programme for both children and adults, and an adolescent treatment service. While the development of these programmes has represented short term solutions to deal with the immediate problems, a final important priority has involved a serious attempt to plan,

coordinate, advise, and advocate for the development of a network of new services to meet intermediate and long range projected needs.

Priorities can obviously be altered by fiscal and political pressures. In the case of BDS, developing programmes for people currently in need of services in the community would have remained our primary commitment had it not been for the political situation and the fiscal incentive tied to removing former Bronx residents from large distant institutions and returning them to the community.

Since the large institutions were considered a "State" problem because a State agency ran them, City and voluntary agencies felt little obligation, until pressured, to change their priorities to include aiding in the removal of the retarded from institutions. Furthermore, the return of former institutionalized residents to the community provoked concern among the more vocal constituency within the community who saw the possibility of deinstitutionalized people competing with their agency clients or retarded relatives for the limited services currently available within the Bronx. These concerns, coupled with fear of "dumping" the institutionalized retarded into the community and the difficulties in developing smaller community residences in an urban setting, have all impeded the process of deinstitutionalization. Added to this, at the institutional level, has been the active and passive resistance of the employees of the large State facilities, the fear of individual job loss and economic loss to the institution's local community, plus resentment toward the BDS staff "outsiders" who appear to institutional employees to be trying to change the status quo. All of these combine to delay deinstitutionalization efforts.

In planning services and seeking priorities within the community, numerous conflicts have also existed between agencies that give service to children and adults with different

types of handicaps. Agencies serving the cerebral palsied, the mentally retarded, the autistic, the birth defects population, and the learning disabled, with the objective of aiding their specific clients, compete for control and funds. In doing so, they try to influence decisions about funding for new programmes, whether the funds emanate from Federal State, or City sources. With all of these governmental agencies also often indicating different priorities and conflicts in their respective planning functions, this complex situation obviously creates obstacles that inhibit rational planning and fail to satisfy competing special interest groups.

There is almost universal agreement that large State institutions are undesirable places for the retarded to live. Most professionals and consumers favour providing as normal or home-like an environment for the retarded, plus as normal participation in community activities as is possible. This is what is commonly called "normalization."

However, though everyone usually appears sympathetic to the goal of "normalization," some parents as well as professionals differ as to whether the first priority should be the immediate development of basic, although segregated services, even when "normalization" does not appear to be feasible. Some professional programme planners and parents also question whether normalization in terms of near normal community living is a realistic goal for any but the mild to moderately retarded. Those with more pragmatic attitudes appear to want development of as many basic services as possible (e.g., residential, education, habilitation, vocational, etc.) where none currently exist, and do not concern themselves with how well integrated the handicapped are into the rest of society. The pragmatists point out that it is unrealistic to expect society to change with sufficient alacrity to adapt to the needs of the handicapped as fast as parents or professional planners desire.

There are conflicting views on the methods of eliminating

the large dehumanizing State institutions. There are those who desire to close large institutions immediately versus those who prefer gradually to phase out these large institutions and avoid "dumping" clients back into communities that are unprepared to provide adequate services. The preferred alternative goal of almost everyone is the development of smaller residential facilities. However, practical considerations, such as locating appropriate space, rebuilding older suitable housing to meet the needs of the handicapped, complying with local building codes, and overcoming community opposition and zoning laws, make the development of smaller residential centres a difficult and exasperating task. It is unfortunate that a recent Supreme Court ruling permitting communities to exclude groupings of unrelated people in residential areas may further inhibit progress in developing local community residences.

A key priority for BDS, as a community-oriented programme, has been a strong advocacy role for all the retarded and developmentally disabled, irrespective of current location and degree of disability. Few agencies, public or voluntary, appear anxious to serve the severely retarded. In addition to the advocacy role, when dealing with community agencies, the most effective means of demonstrating our interest, concern, and value has been when staff acted as coordinators and collaborators in helping the agency and community obtain new resources and programmes. This is carried out while making it clear that we do not have a desire to control other agencies programmes. This approach has been most successful when coupled with our efforts in providing education and training to agency and community staff.

BDS has chosen the development of geographically distributed community-based programmes as the primary means of meeting the goals of dealing with crisis cases, deinstitutionalization, and developing a network of needed services in the Bronx. It has become quite clear, however, in

managing a community services operations, that we are far more exposed and open to criticism than if we hid behind the walls of an institutional programme. Bringing the handicapped into the community and next door to people makes them more familiar with the problem. There is a serious question as to whether familiarity breeds contempt, acceptance, fear, or children. The latter may seem facetious, but fears of overt sexual activity and pregnancies among retarded adolescents and adults cause widespread concern. In a community service operation, our successes and failures are more obvious than they would otherwise be. While programme staff usually try to maintain a relatively low profile, they are often accused of trying to change society when they act in an advocacy role. Furthermore, it has not been uncommon for the media to report inaccurately community programme activities.

Finally, since there is no proof of the effectiveness of community services of the type we are attempting to develop, it remains an important priority for BDS to develop a system to evaluate the results of its programmes. This will require a systematic programme and cost evaluation effort, plus an automated information-gathering system which has concomitant safeguards to maintain confidentiality. A system of this type could be used for both planning and evaluation purposes. This system could correlate the demographic data, the programme activities, the status pre- and post-programme, particularly the pre- and post-institutionalization functional levels and behaviour of the deinstitutionalized, plus the relative costs of the various treatment alternatives. Due to fiscal restraints and the pressures to develop rapidly new service programmes, BDS has not yet been able to make a sustained effort to develop this type of evaluation system. However, it remains an important priority for the future.

Summary

This chapter has discussed the practical problems that

have confronted a new ambitious programme aimed at developing community mental retardation services in an urban setting. Many of the problems reported are generalizable to other communities and service situations. In examining the obstacles inhibiting the development of new services and innovative approaches, we have described the new model of community services which we are utilizing. We have also discussed some of the pragmatic methods of dealing with the problems and the reactionary and bureaucratic forces that have accentuated our difficulties and slowed us down, but, fortunately, not stopped us.

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3

READING: MAKING A START

Following the careful assessment of a learner's abilities as suggested in the previous chapter, it should be possible to plan the appropriate starting points for intervention.

Prereading and Early Reading Experiences

For most children a carefully structured prereading programme is un-necessary (McCoy 1995). Once the child has adjusted to the demands of school life, instruction in reading can and should begin. For a few, particularly those with significant intellectual impairment or perceptual difficulties, it may be valuable to provide prereading experience which prepare these children for beginning-reading, to take them to the threshold of simple word recognition (Choate and Rakes 1993). Training in listening skills, encouraging a liking for stories, ensuring familiarity with language patterns, all form important parts of the programme. Indeed, aural-oral language enrichment activities form the basis of beginning-reading programmes.

When the beginning-reading activities involve word-to-word matching, word-to-picture matching and letter and word copying, the child is ready to enter the next stage of development. The golden rule to remember is to make the work link as closely as possible with educational skills and media the child needs to use at this time. For instance, in prereading activities, if the child needs to improve in visual discrimination it is likely to be of maximum benefit if letter

and word matching are utilized, rather than the matching of pictures and geometrical shapes.

Form perception and visual discrimination

For a very few children, particularly those with vision impairment or those with neurological problems, form perception may need to be improved. If oral language is adequate and if the child has realized that the marks on paper represent words which can be spoken, the next important skill to consider is that of form perception, which at its highest level is reflected in the fine discrimination of individual letters and sequences of letters.

If a young or disabled child is very poor at form perception the teaching will need to begin with the fitting of hardboard shapes into inset formboards, matching and sorting simple regular shapes and feeling these shapes hidden within a puzzle box where the child can handle but not see them. He or she then identifies the shape just handled from a set of line drawings outside the box. Later the activity can be reintroduced using small plastic letters of the alphabet in the puzzle box, these being handled and identified in the same way. This activity is useful for holding attention through active participation and enjoyment.

Other useful activities which will help to develop awareness of shape and form and encourage attention to detail include: copying regular shapes using drinking straws, drawing around templates, drawing within stencils, tracing figures, completing unfinished figures on worksheets. These activities are of particular importance to young children with impaired vision or with perceptual problems.

The sequence for training visual discrimination should follow the progression:

- picture matching;
- shape matching;

- letter-like shape matching;
- letter and word matching.

The point of entry for a particular child into this sequence will be determined from diagnostic assessment.

Word-to-picture matching is a useful activity in the beginning stages of word recognition. Colourful pictures can be cut from magazines and mail-order catalogues, or the child's own drawings and paintings can be used. Appropriate words or captions are provided on slips of card. The child places the card on or next to the picture and reads the word. The activity can be used with groups of children, particularly if a magnetboard is used to display the words and pictures.

If a child is able to sort and match word shapes and has adequate language development, he or she is ready to read through one of the various whole word and meaning-based approaches, even though phonics readiness may not be present. The child will benefit from a language-experience or shared-book approach (see later).

Visual retention and visual sequential memory

It is helpful for some children to be trained in the careful observation of material which they are then required to reproduce from memory in correct sequential order. This is sometimes done using picture cards (for example, cow, house, man, ball, cup), but it is more useful if the material provides letter cards which can be arranged to spell simple words. The training should then require the child to write the sequence after brief exposure on a flashcard. This aids early spelling skills as well as word recognition skills for reading.

Undoubtedly, one of the most valuable activities at this level is sentence building. At any age level, a learner who is beginning to read should be given the opportunity to construct and reconstruct meaningful sentences from word cards.

I saw my Dad make spaghetti

This procedure has been strongly advocated by Kemp (1987), as both an assessment and teaching technique. A child's ability to construct, reconstruct and transform sentences reveals much about his or her language competence and memory for words. Sentence building can be incorporated into the language-experience approach described later.

Hand-eye co-ordination and motor control

Building, cutting, sticking, threading, tracing, jigsaw-making and games activities which go on in all preschool and junior classrooms are already developing fine motor co-ordination for most children. A few will need much longer at such tasks and may benefit from specific training. Large chalkboard work using big movements is a very useful starting point. In cases of very poor control, it is helpful if the teacher guides the child's hand in order to make the movements smooth and rhythmical and to establish a correct motor pattern. Simple mazes and dot-to-dot patterns produced as worksheets are a useful extension from large-scale movements to finer control. Writing patterns can be used for both chalkboard work and practice sheets. It is vital that children who do have some degree of difficulty in co-ordination are taught correct letter formation. The acquisition of handwriting should not be left to incidental learning. This applies particularly to children with cerebral palsy, spina bifida, hydrocephalus or with neurological dysfunction resulting in clumsiness.

Problems of laterality (that is, choice of hand for manual tasks and dominant eye in visual tasks), and poor directional sense (orientation) are sometimes found to be present in students with learning difficulties. These factors are rarely the cause of a child's learning problems, but rather are another symptom of inefficient functioning. Some older American programmes stress the need to establish a strong lateral preference in a child before attempting remediation in academic skills, and suggest exercises for doing this. However,

such programmes have not proved to be particularly successful and most teachers today would not deliberately set out to rectify crossed laterality or to alter hand preferences in their children with special needs.

If the child's balance and general co-ordination are very poor, teachers may need to plan specific activities for inclusion in a daily PE programme (e.g. hopping, beam-walking, small ball catching, etc.). In some schools these children may be receiving special physical education or therapy from a visiting teacher, and close liaison with this teacher will be essential if the activities are to be integrated and reinforced in the regular class programme.

Reversal Problems

Crossed laterality, lack of firmly established lateral preference and poor directional sense frequently result in a marked tendency to *reverse* shapes (e.g. letters or words in reading, numerals in arithmetic). In extreme cases mirror-writing may be produced by the child. It is quite normal for children up to the age of 6-1/2 years to confuse letters like p, b, d and q in their reading and writing, so undue attention to this problem would be out of place below that age. However, reversal problems which continue in some cases through to the secondary school level do require attention. A few ideas for remediation are provided here.

If a child above the age of 7 years is still confusing p, b, d, q or u, n, it is essential that he or she should be given a motor cue (kinaesthetic training) to establish the correct direction for these letters. Finger-tracing one of the letters until mastered is probably the most positive way to overcome the problem. First the child should close eyes or wear a blindfold while the teacher guides the index finger of his or her preferred hand over the shape of the letter 'b' on the blackboard. The letter is simultaneously sounded or named as tracing is repeated several times. The teacher now takes the child's finger over a

series of other letters and the child must indicate quickly and clearly, but still with eyes closed, each time a letter 'b' is traced. The aim here is basically to give a child a physical image against which to discriminate d and b.

It is also useful to provide the child with a self-help card showing that the 'little b' is really only the bottom half of a capital B. This card can be left displayed in the classroom for some time after training. It is important to stress the child is given the correct motor cue for letter and numeral formation in the early stages of handwriting instruction many of the reversal problems would not persist.

Auditory training

It has been shown conclusively that auditory skills play a major role in the process of learning to read (Pressley and McCormick 1995; McGuiness, McGuiness and Donohue 1995). Progress beyond the stage of building up a basic sight vocabulary using whole word recognition is dependent upon the development of phonic decoding skills. As previously stated, the acquisition of phone skills is in turn dependent upon 'phonemic awareness', including in particular adequate auditory discrimination, auditory analysis and phoneme blending. It is likely that these processes are also involved to a significant extent in spelling ability.

Auditory training need not always precede any introduction to reading, unless a child's auditory perception is markedly deficient (Frost and Emery 1996), or where a child has a known hearing loss and auditory training is recommended as part of a programme to increase the child's use of residual hearing. Usually auditory training can be provided alongside the child's early reading experiences while a basic sight vocabulary is being built up. Many of the activities which are being used to teach basic phonic knowledge are also simultaneously training listening skills.

The principal aim of auditory training is to increase awareness of sound patterns within words. Brief consideration will be given to three of the most important auditory processes, auditory discrimination, auditory analysis (the segmentation of words into sound units) and sound blending.

Auditory discrimination

A teacher will find it useful to collect pictures from mail-order catalogues and colour supplements to use in games requiring auditory discrimination. The pictures may be set out in pairs and the child must quickly touch one of a pair of pictures when the word is called: for example, 'pear' (pictures show 'bear' and 'pear'), 'three' (pictures show '3' and 'tree'). Worksheets can also be made with pictures of objects which the child must identify when the initial sound is given. When games like these have been played it is sometimes useful to get the child to say the name of each pictured object clearly and then to listen to his or her own voice played back on a tape recorder, thus dealing with articulation alongside auditory discrimination.

Classroom games which involve 'Finding the odd one out' (for example, *boy, bag, hand, band*) and which may involve rhyme (for example, *sand, hand, feet, land, band*) are popular. With young children 'I spy' games using initial letter sounds rather than letter names are useful.

Auditory analysis (segmentation)

Some of the activities listed above have included a simple level of auditory analysis, that of isolating the initial letter sound in a word. Games can be extended to listening for final sounds (for example, 'Put a line under the pictures that end like *snake*'. Pictures show *rake, bucket, cake, ball*).

Auditory analysis can be taught, or at least encouraged, by spending a little time in taking words apart into their component sounds, raising the actual process to the level of

awareness in the child. For example, 'What's this picture, Jackie? Yes. Good. It's a frog. Let's listen to that word FROG. Let's say it very slowly. Let's stretch it out. FR-O-G. You try it.' This activity involves listening, not reading.

Phoneme blending

This is also referred to as auditory blending or sound blending, and is the complementary process to auditory analysis. Encourage the children to gain experience in putting speech sounds together to build a word. 'I spy with my little eye a picture of a FR-O-G.' Use the same technique while reading or telling a story to the children. 'The boy came to the wall. He couldn't get over. The door was st-u-ck...' Children quickly supply the words as the story goes on. Sound blending is also used in the early stages of word-building from print with simple consonant-vowel-consonant words (l-o-t; m-a-n). Teachers should be on the look-out for children who find this process difficult, since it is a vital subskill for reading and can be actively developed.

Phonemic Awareness and Reading Progress

Phonemic awareness appears to be important not only for development of phonic decoding skills but also as a direct aid to rapid word recognition. Studies have shown that children can be helped to increase their phonemic awareness through specific training, both separate from and embedded within their reading programmes (Hatcher, Hulme and Ellis 1994; Ayers 1995; Vandervelden and Siegel 1995).

Olson (1990) and North and Parker (1994) suggest that young children should be exposed to activities which raise their awareness of speech sounds, rhymes and alliteration through daily activities in preschool settings. They recommend as useful listening games and puzzles which, for example, require the children to clap out the number of syllables in their names, the number of words in a phrase and later the number

of sounds within a familiar word. Activities can also be introduced which require children to blend sounds or syllables together to make words.

In most training programmes, six aspects of phonological awareness are specifically taught alongside the reading of texts for enjoyment and information. These six aspects are:

- rhyming: listening to and saying nursery rhymes; finding words which rhyme; generating a new word to rhyme with a given word;
- alliteration: 'the greedy green gremlins are grinning'; 'Hannah's house is high on the hill';
- blending; sounds into syllables and syllables into words;
- segmentation; sentences into words, words into syllables; syllables and words into separate sounds;
- isolation: identifying the initial, final and medial sounds in a target word;
- exchanging: substituting a new initial sound for another sound to produce a new word: 'met' becomes 'pet'; 'lost' becomes 'cost'.

Olson (1990) considers that one of the strengths of the whole language approach is the emphasis it places upon writing from the earliest stages. The use of invented spelling by the children almost certainly helps them develop phonemic awareness and an understanding of the alphabetic principle. It is helpful to inspect young children's invented spelling in their early attempts at writing as this can reveal the extent to which they have developed phonemic awareness. The same is true of older students with learning difficulties.

Children's use of word processors for story creation may also indirectly assist the development of phonic analysis and

segmentation. Jackson (1987) suggests that word processing forces students back to a situation where they need to pay attention to the phonological and orthographic bases of language in order to key in correct sequences of letters to spell words correctly.

In general, research in recent years has confirmed that difficulties in learning to read are more likely to be related to problems with phonological awareness than to problems with visual perception. Students with hearing loss, and others with a specific learning disability which involves weakness in auditory processing, are obviously most at risk since their ability to access the phonemic aspects of the language around them is impaired. For them it will be helpful at first to focus more upon predominantly visual approaches to reading, such as flashcard work, sentence building and transformations using word cards, and written recordings for language-experience books. It is also essential to teach these students self-help strategies for word identification and comprehension, using explicit methods of instruction (Frost and Emery 1996).

Over to you: Planning for a student with a significant disability

Describe the methods and resources you might use to provide a useful introduction to the first stages of reading for a student with mild intellectual disability in the early years of primary school.

Indicate how you might incorporate some of these activities within the regular classroom programme.

Selecting an Approach

Assuming that the learner has the necessary entry skills of adequate visual discrimination, phonological awareness and at least some ability to converse in simple sentences, two complementary approaches might be used; sharedbook experience and language-experience reading. The two approaches are entirely compatible with modern theories of

language acquisition and reading skill development. In both cases, when used for remedial teaching purposes they require a much greater degree of structuring than is necessary when applied to children without learning problems. Neither method precludes the teaching of word-attack skills, as will be illustrated in the descriptions below.

Shared-book experience

This approach owes much to the influence of the New Zealand educator, Don Holdaway (1982, 1990).

In the shared-book approach children are brought to an enjoyment of reading through stories read by the teacher using a large-size, specially prepared book which can be seen easily by the group or class of children. Holdaway says that the book should have the same visual impact from 10 feet away as a normal book would have on the knee of the child. Stories, poems, jingles and songs which children love and which present an opportunity for them to join in, provide excellent material for the early stages. Familiarity with the language patterns involved in the stories is developed and reinforced in a natural way. Attention (on task behaviour) is easily maintained by the teacher who can present the material with enthusiasm and whole-hearted enjoyment. The pages of the book become a giant teaching-aid on which the teacher can develop word recognition and decoding skills informally, as well as convey the story. The teacher may, for example, place a hand over a word (or mask it in some other way) so that the group of children must suggest what the word is likely to be, thus helping them to develop an awareness of cotextual cues, language patterns and prediction. By covering only part of the word, the teacher helps children to utilize initial letter or final letter cues.

It should be noted that shared-book experience embodies all the basic principles of effective teaching, particularly the important elements of teacher demonstration and modelling,

active participation and successful practice. The approach is also soundly based upon, and replicates, those aspects of 'the bedtime story at home' which Holdaway found to be important influences on early reading progress in school. As a beginning-reading method the approach has proved equal or superior to other methods, and produces very positive attitudes toward reading, even in the slower children. By its very nature, shared-book sessions are *inclusive* of all children.

Language-experience approach

The language-experience approach uses the child's own language to produce carefully controlled amounts of reading material. It could be described as a form of 'dictated story' approach. From the viewpoint of the slow learner or failing reader the approach combines two major advantages. There is the possibility of utilizing the child's own interests to generate material for reading and writing; and the teacher is able to work within the child's current level of language competence at all times. This is of tremendous value for children who are well below average in general language development. The work produced is usually relevant and motivating.

With the young child or the child of very limited ability the starting point for the language-experience approach can be the labelling by the teacher or aide of some of the child's artwork or drawings, no matter how primitive, with captions which the child suggests. 'This is my cat, Dotty'; 'I can ride my BMX bike fast'. The child and teacher together read these captions and revise them for a few minutes each day, without at this stage drawing attention to individual letters or words. The child can be encouraged to build these sentences using word-cards.

During this early stage of the programme the child can be helped to contribute a dictated sentence following some class excursion to the airport or a farm. 'I saw a Jumbo Jet';

'The cow licked David on the face'. These sentences are added, along with others from the class, to the picture-map which the class has produced as part of the follow-up to the excursion. Again, they are not in any way analysed or drilled, and serve the purpose of establishing in the learner's mind the notion that 'What I say can be written down'.

After a few weeks of this introductory work the child is ready to make his or her first book. A topic is carefully selected: e.g. 'speedway'. The teacher produces some visual material which will provide the illustration for the first page, perhaps a picture of the child's favourite speedway rider from a magazine. Teacher and child talk about the rider and from the discussion they agree upon one brief statement which can be written under the picture: 'This is Chris Copley.' The teacher writes (prints) the agreed statement for the child who then copies it carefully under the teacher's version. If the child cannot copy due to perceptual-motor or co-ordination problems, he or she can trace over the words with a coloured pencil or wax crayon. Both teacher and child then read the statement together once or twice and the child is left to paste the picture carefully into the book. Even this activity must be closely supervised with some children in order that the page looks attractive rather than messy. With some older children they can be encouraged to type the same sentence on a sheet of paper and paste that into the book to help generalization from handwritten to typed form of the same words.

Next day the child is presented with the same statement written on a strip of card: 'This is Chris Copley.' Without reference to the book the child is encouraged to read the words. He or she may have forgotten the material so some brief revision is needed. The child then cuts the strip of card into separate word-cards. These are placed at random on the desk and the child has to arrange them in correct sequence. If the child fails he or she must spend time matching the word-cards against the original in the book until the sequencing task

can be performed correctly. At this point the teacher picks up one of the cards, perhaps the word 'is', and using it as a small flashcard asks the child to pronounce the word. This is continued until the child can recognize each word out of context. The word-cards are then placed in an envelope stapled in the back cover of the book, ready to be revised the following day.

Over the next week the child continues to produce a page of his or her book with much guidance from an adult. Revision of the previous day's words ensures repetition and overlearning to the point of mastery. The teacher's control over what is written will ensure that not too much is added to the book each day which might otherwise result in failure to master the new words. If the child is allowed to dictate too much material this will result in failure to learn and loss of satisfaction.

Once important sight words are mastered these can be checked off or coloured in on a vocabulary list in the front cover of the child's book. McNally and Murray's *Key Words to Literacy* list or the Dolch sight vocabulary lists (see Preen and Barker 1987) are very appropriate for this purpose. Such charting of progress in the book gives the child visual evidence of improvement, and also indicates to the teacher what has been covered so far and what still needs to be taught. If certain words seem to present particular problems for the child games and activities can be introduced to repeat and overlearn these words until mastered (e.g. word bingo). Gradually the amount written can be increased and after some months a child will need less and less direct help in constructing his or her own sentences. The approach may sound slow and tedious but it does result in even the most resistant cases of reading failure making progress. It is highly structured and the growth in word recognition skills is cumulative.

At some stage in the programme the teacher must help the child to expand his or her word-attack skills. For example,

perhaps the child has used the word 'crash' in writing about the speedway interest. In a separate booklet the teacher can help the child to learn the value of the blend 'cr' by collecting other 'cr' words (crab, crook, cross, cry, etc.). Similarly they can experiment with the unit 'ash' from the word 'crash' (b-ash, d-ash, c-ash, r-ash, etc.). This incidental word study linked with meaningful material from the child's own book is important, but it will still be inadequate for developing fully functional decoding skills. It will be necessary to teach word-attack and spelling skills quite explicitly for certain students.

Clearly the shared-book experience can operate in parallel with the individualized language-experience approach in both whole class and remedial group situations. Once a child has made a positive start using this language-experience approach he or she can be introduced to a carefully selected 'real' book. It is wise to prepare the way for this transition by including in the child's final language-experience book most of the words which will be met in this new book.

The basic principles of the language-experience approach can be used with non-literate adults and those learning English as a second language (Wales 1994).

The visuo-thematic approach

Jackson (1987) described a carefully structured variation of the language-experience approach which he had found useful in clinical settings. He called the approach 'visuo-thematic'. The learner (child or adult) is presented with a visual stimulus picture which has a number of ideas in it to generate discussion and to suggest a story, without too much imagination being required. Jackson found detailed cartoons from magazines or newspapers to be useful and he suggests that the learner be encouraged to seek out suitable material to bring to each session. Jackson outlines the procedure in the following steps.

The child obtains a picture which he or she pastes on a piece of cardboard, together with a pocket or envelope in the corner. This pocket is to house small cards containing all the words the child can think of to describe various aspects of the picture. The child is then required to have three columns ruled on a page headed *naming words*, *describing words*, *action words*. He or she is then asked to try to think of at least six words which can be placed in each of the above columns, thus giving a total of at least eighteen words for the picture. The words are written out at home or during the lesson in their appropriate columns and the child is then asked to put each word on a small card and place it in the pocket. In this way a 'library' of pictures and their associated vocabularies is built up by the child. When the child comes to the lesson the teacher or aide checks the words for accuracy and tests the child's ability to recall them. Some practice is then given in spelling one or two of the words.

The next step is for the child to construct his or her own series of questions about aspects of the picture. The child is then asked to write a story about the picture and to select a title. The story is read by the child and adult together and any corrections noted. After this the child is asked to rewrite the story or type it in its final form and to paste it in the book beside the vocabulary lists. This procedure is repeated at least once a week, using on each occasion a different story but the same format and structure. Each story is filed and kept available for rereading later.

Jackson (1991) has provided extremely useful suggestions for working individually with a student with severe reading problems in his book *Discipline: An Approach for Teachers and Parents*. His 'structured alphabet kit' is also clearly described in that text.

Over to you: Selecting a beginning method

Take one of the basic approaches presented in the section above and discuss how it might be accommodated in a classroom where the general language arts programme is based upon whole language philosophy.

Reading Recovery

Reading Recovery is an early intervention programme first developed in New Zealand (Clay 1985) and now used in North America, Britain and Australia. Children who are identified as having reading difficulties after one year of school are placed in the programme and receive daily intensive tuition on a one-to-one basis. They remain in the programme for approximately fifteen weeks, or until they have reached the average level of their class (De Ford 1991). The aim of the programme is to reduce substantially the number of children who experience on-going and cumulative literacy problems. This is achieved by providing the opportunity for accelerated learning.

Evidence has accumulated to indicate that Reading Recovery as an early intervention programme is very effective in raising young children's reading achievement and confidence (Trethowan, Harvey and Fraser 1996). It is claimed that the programme can be so effective that only 1 per cent of children attending the individualized sessions require further, long-term assistance with reading and writing (Clay 1990). It should be noted, however, that this level of efficacy has been questioned by some observers who believe that gains made in the programme are not always maintained over time (Chapman and Tunmer 1991). It has also been observed that advantages gained in the Reading Recovery programme do not necessarily spill over into better classroom performance, partly because the reading resources provided in the regular setting are not carefully matched to the child's ability level (Wheldall, Centre and Freeman 1993).

A typical Reading Recovery lesson includes seven activities:

- rereading of familiar books;
- independent reading of the book introduced the previous day;
- letter identification activities with plastic letters;
- writing of a dictated or prepared story;
- sentence building and reconstruction from the story;
- introduction of a new book;
- guided reading of new book.

The texts selected are designed to give a high success rate; and confidence is boosted by frequent rereading of the familiar stories. Optimum use is made of the available time, and students are kept fully on-task. Some attention is given within the instructional time to listening for sounds within words and practising phonic skills. Iversen and Tunmer (1993) found that when increased attention was given to phonological training, together with explicit instruction in letter-sound correspondences, the students in Reading Recovery programmes made even more rapid progress.

The obvious stumbling block with Reading Recovery is the need to find time and appropriately trained personnel to provide daily tuition to the selected students. It is probable that volunteer helpers used within Learning Assistance Programmes (LAP) in schools would improve the quality and impact of their assistance if they utilized the teaching strategies from Reading Recovery under the teacher's direction.

Details of the Reading Recovery programme, including instructional strategies, practical ideas and use of time are given in Clay's (1985) book *The Early Detection of Reading Difficulties*.

Do Learning Disabled Students Need Different Methods?

Children with a specific reading disability do not, in general, need a totally different approach for instruction in reading. It was stated that their priority needs are for a carefully structured and effectively taught programme, which emphasizes the functional aspects of literacy and places a clear focus upon acquiring appropriate strategies for comprehending text. The methods advocated for learning disabled students are the same as those advocated for any students, but applied with greater precision. In particular, students with a specific reading disability require the following issues to be adequately addressed.

- Having a real reason for reading, writing and spelling is essential. There is a real danger that children with severe reading problems may receive, if tutored individually, a remedial programme which contains too many isolated skill-building drills. There is a need to apply these skills realistically as they develop.
- Many dyslexic children benefit from being taught more about the structure of language (for example, the meaning of the terms 'syllable' and 'prefix', etc.) as part of their programme. It is essential to help the student understand the close interrelationship between oral language, reading and writing.
- A structured use of the language-experience approach is widely advocated for learning disabled children.
- The use of strategy training and task-approach training, as described, will help the student gain better control over his or her reading and writing. This is particularly important in higher-order reading skills, such as comprehension (Butler 1995; Dole, Brown and Trathen 1996).

- Emphasis usually need to be placed upon the systematic teaching of phonic decoding skills (that is, the teaching of letter sounds and how to blend these into words). Phonemic awareness may need to be developed in some students.
- Multisensory approaches seem to help the learning disabled child assimilate and master particular units, such as letter-sound correspondences and sight words.
- Material must be selected very carefully to match the child's current ability and interest level. Some LD students profess to *like* the books in basal reading schemes (Reetz and Hoover 1992). This can be an advantage in terms of controlling the difficulty level of text in the early stages.
- Teachers should not present too much material at once. They should determine as rapidly as possible how much a particular student can handle successfully at one sitting, and avoid tiring or frustrating the student. However, regular and intensive practice sessions are essential, and the ultimate long-term aim is to *accelerate* rate of learning.
- There is a need to revise and review previously taught skills or concepts at frequent intervals. Practice and overlearning are vital for success.

Summary

In this chapter attention has been given to appropriate prereading and early reading experiences, necessary for some students with learning difficulties or disabilities. It was pointed out that prereading activities are not routinely required by all students.

Particular attention was given to the important topic of auditory training, since phonemic awareness has been

identified a number of research studies as an essential prerequisite for early reading success. Where phonological skills are weak, they can be significantly improved through explicit teaching.

Several beginning-reading approaches were described in detail. In general most remedial reading approaches do not differ greatly from mainstream approaches. Much useful help can be provided for many children with special needs simply by a more carefully structured use of the regular class programme and applying more direct teaching. Where this is possible it is to be preferred to offering a totally different programme requiring one-to-one tuition in a withdrawal room situation. However, some children's learning difficulties are so acute, or their attitude toward reading so negative, that their needs can only be met by a carefully designed programme which requires methods and materials that differ markedly from those in regular use.

4

SOCIALIZATION PROCESS AND SPECIAL EDUCATION

This analysis of factors that impede socialization will focus upon major dimensions of child adaptation that have been identified in clinical and personality research. A model for major dimensions of child adaptation that includes both social adjustment and social competence will be proposed. Emphasis will be placed on environmental and social determinants of the socialization of those dimensions and on family variables that have an early, continuing, and cumulative impact on child development instead of on specific traumatic events and specific child-rearing practices that have been related to socialization of systems of behaviour (Child, 1954; Zigler and Child, 1969). Major dimensions of parent behaviour, the network of family relationships, processes of socialization, and family variables that influence the major dimensions of adaptation will be discussed. In addition, evidence that social stresses and supports influence the family's ability to socialize the child will be interpreted as supporting family-centred intervention programmes designed to strengthen and support family care of the child. Finally, suggestions will be made concerning the implications of the analysis for the professions and institutions that relate to families and children.

Among neo-Freudian theorists, as well as personality researchers, there is a shift in emphasis in analyses of socialization from a focus upon specific biological systems of

oral, anal, and sexual behaviour to a focus upon global social behaviours such as trust, intimacy, industry, and generativity (Erikson, 1959). Congruent with this changing emphasis in research on socialization is the dictionary definition of the term. *Socialize* is: "1. to make social; adjust to make fit for cooperative group living. 2. to adapt or make conform to the common needs of a social group" (*Webster's New World Dictionary, College Edition*, 1968). Thus, that socialization emphasizes social adjustment and social competence is supported by theory, research and the dictionary definition.

In developing a model for major dimensions of child behaviour that includes both social adjustment and competence, a number of clinical and statistical studies of major dimensions of child behaviour will be integrated into a two-dimensional circumplex model of social adjustment. Evidence from comprehensive studies of child behaviour in the classroom that a dimension of task-oriented behaviour can be isolated will be presented. Since intelligence is also a major dimension of adaptation that contributes to prediction of social achievement, a hierarchical model for adaptation with two major dimensions of social competence, intelligence and task-oriented behaviour, and with two major dimensions of social adjustment, extraversion versus introversion and love versus hostility, will be proposed.

Research on the ecology of child development, particularly the interaction of the child with his social environment, is needed to analyze the factors impeding socialization. In this area, both theory and research are contributing to the development of a psychology of relationships to complement the current emphasis on a psychology of personality. For example, Burgess' (1926) discussion of the family as a "unity of interacting personalities" and Handel's (1965) review of the "psychological study of whole families" have emphasized the need to study family relationships. The fruitfulness of research on the entire network of family relationships among mother,

father, child, and sibling will be illustrated by a review of processes of socialization and of evidence of family influence upon the major dimensions of child adaptation.

The need for a more detailed analysis of factors that influence family relationships has been shown both by naturalistic studies of the social stresses and supports that influence family care of children and by family-centred early intervention programmes. Researchers and clinicians are no longer content with the finding that parent behaviours influence child behaviour, but are searching for modifiable factors that may foster both positive parent behaviour and child development. Thus, research is becoming more comprehensive by studying the child and the family as they are influenced by social, cultural and community variables.

Implications of research on the factors that impede socialization for development of more effective services for children are noted. Intervention research suggests the need to move from intervention programmes to a re-evaluation of traditional professional roles in child health, child care, and education, for research and demonstration programmes will have limited impact on children unless they can influence the development of more effective professions and institutions. In such a re-evaluation, this analysis suggests the need for a shift from child-centred to more family-centred training and practice in the professions that relate to children and families.

Identification of Major Dimensions of Social Adjustment and Competence

Despite the controversies about interpretation and etiology, the identification of a major dimension of intelligence has contributed in countless ways to both behavioural research and clinical practice. In the area of personality research, converging findings from many different researchers on normal and clinical populations and from different types of data suggest that much of the variance in social adjustment

and competence can be included in a limited number of major dimensions. These dimensions, while often similar in their behavioural content, have been given very different labels by different investigators. However, several reviews of personality research have recognized similarity in the different concepts and have isolated similar major dimensions (Anthony, 1970; Schaefer, 1971; Quay, 1972). Work on the identification of major dimensions of adjustment and competence will be reviewed to contribute to future research on socialization and to description of behaviour in clinical practice.

Ackerson's (1942) analysis of 125 behavioural problems from over 3000 case histories resulted in the development of two clusters of personality and conduct problems. The personality problems score correlated with depression, an unhappy appearance, mental conflict, sensitivity, worrisomeness, nervousness, and feelings of inferiority, while the conduct problems score correlated with cruelty, destructiveness, truancy, stealing, lying, swearing, and disobedience. A similar study of child guidance clinic records by Hewitt and Jenkins (1946) also isolated clusters of traits which were interpreted as the overinhibited child, which appears similar to Ackerson's child with personality problems; the unsocialized aggressive child, which is similar to Ackerson's child with conduct problems; and the socialized delinquent with less evidence of hostility. Jenkins, Nur Edlin, and Shapiro (1966) later reported subgroups within the major group of inhibited children of shyseclusive and overanxious neurotic and subgroups within the aggressive group of hyperactive, undomesticated, and socialize delinquents. Achenbach (1966) also analyzed child psychiatric case records and factor analyzed the intercorrelations of symptoms separately for boys and girls. The major bipolar factor of internalization versus externalization, anxious, fearful, withdrawn behaviour versus aggressive, delinquent behaviour, appears to be related to Ackerson's (1942) and Hewitt and

Jenkins' (1946) clusters. Anthony (1970), in an integration of statistical approaches to classification of childhood behaviour disorders, also suggests that Collins, Maxwell, and Cameron's (1962) anxiety and rebelliousness factors can be interpreted as defining inhibition and aggression. Despite the unrepresentative samples and the difficulties of analyzing psychiatric records, the degree of consensus on major patterns of child adjustment as derived from child clinical case records is high.

Ratings by school teachers also have revealed two major dimensions of child adjustment which are similar to those found in analyses of psychiatric records. From teachers' ratings of behaviour problems, Peterson (1961) isolated two major dimensions of personality problems and conduct problems which were similar to Ackerson's clusters. Peterson (1960) had earlier identified major dimensions of extraversion-introversion and adjustment-maladjustment in the first two factors of several factor analyses of child behaviour ratings. Perhaps Peterson's (1960, 1961) analyses might be integrated by interpreting conduct problems as combinations of extraversion and maladjustment and personality problems as combinations of introversion and maladjustment. Schaefer (1961) developed two-dimensional circumplex organizations of school behaviour ratings and labelled the major dimensions introversion-extraversion and love-hostility. Becker and Krug (1964) also utilized Guttman's (1954) circumplex model to organize a set of bipolar behaviour ratings within major dimensions of extraversion versus introversion and emotional stability versus emotional instability. Similarly, Baumrind and Black (1967) organized Q-sort data into a circumplex model that they related to Schaefer's (1961) and Becker and Krug's (1964) models. Thus, convergence on a two-dimensional circumplex model for child behaviour can be seen in the syntheses of different investigators utilizing a number of different sets of empirical data.

Both Anthony's (1970) and Quay's (1972) integration of clinical studies of psychopathology have agreed upon two major patterns: 1) personality problems, overinhibition, anxiety, internalization, and withdrawal, and 2) conduct problems, rebelliousness, anti-social aggressiveness, and extremalization. Quay (1972) cites 15 representative empirical studies that define the two dimensions of conduct problems or aggression and personality problems or withdrawal. Both Anthony (1970) and Quay (1972) attempted to integrate studies of psychopathology with less attention to variations in behaviour in more representative populations. Yet many of the dimensions isolated from psychiatric patients are similar to those found in more representative samples. Therefore, a two-dimensional circumplex model is used to integrate studies of both clinical and more representative populations in Table 4.1. Both two-dimensional and circumplex organizations of behaviour are included, with the columns that represent different angular locations in a circumplex organization including concepts proposed by different investigators. Only the labels used for different dimensions or different sectors of the circumplex orderings are included, but a more comprehensive mapping could be developed by also plotting the more specific behaviours included in the different analyses.

The bipolar dimension of extraversion ($360/0^\circ$) versus introversion (180°) show the clearest consensus in the labels assigned by different investigators. Externalization, which is clearly more related to conduct problems, was included with extraversion only because of its statistical independence of "severe and diffuse pathology" in Achenbach's (1966) study of symptoms of child psychiatric cases. Studies of more comprehensive samples of behaviour and of more representative samples of children show a different factor structure. The neighbouring sector of the circumplex organization includes the extraverted adjusted behaviour (45) of social participation, friendliness, loving, stable, and

interest-participation and the polar opposite sector of introverted maladjusted behaviours (225) of personality problems, overinhibition, withdrawal, anxiety, distrusting, unstable, neurotic, and apathy-withdrawal. Despite the great diversity of concepts and the varying emphasis upon pathological symptoms, the behaviours included in the concepts are very similar.

The bipolar sectors of adjustment versus maladjustment (90° to 270°), which are completely independent of the sector of extraversion versus introversion ($360/0^\circ$ to 180°) again show a great diversity in labels: ego strength, adjustment, love, good socialization, emotional stability, and responsible versus neurosis, ego weakness, maladjustment, hostility, poor socialization, emotional instability, irresponsible, and severe and diffuse pathology. However, the model suggests that these labels are defining the same sector of a circumplex model. Examination of the behaviours included in the labels by different investigators suggests that they are synonyms for the same behaviours. The bipolar sectors at 135° and 315° that are neighbours of adjustment versus maladjustment and extraversion versus introversion have more similar labels: intellectual control, conformity, submissiveness, and cooperation-compliance versus conduct problems, unsocialized aggression, impulsivity, aggressiveness, rebelliousness, assertive, non-conformity, anti-social, and anger-defiance. This sector of hostile aggression would not conflict with an interpretation of the sector of maladjustment at 270° as highly related to less open expression of hostility. Becker and Krug's (1964) label of distrusting in the introverted maladjusted sector suggests that distrust may be a more introverted type of hostility. Schaefer's (1971) identification of a dimension of hostility also found both introverted and extroverted types of hostility, but with the factor of hostility statistically independent of the factor of extraversion-introversion.

Because the concept of hostility refers to more specific

behaviours, the concept of love versus hostility will be used here to refer to the dimension that might also be labelled adjustment versus maladjustment. In contrast, maladjustment might refer also to personality problems and to conduct problems. Despite the problem of labelling the dimensions, this analysis suggests that concepts derived from studies of symptoms of clinical populations and those derived from behaviours of more representative populations can be integrated in a single circumplex model with major dimensions of love versus hostility and extraversion versus introversion.

The emphasis upon social behaviour in labelling major dimensions of adjustment is supported by a number of theorists, including Horney's (1945) dispositions of moving away from others or moving against others, Rosenzweig's (1945) description of intropunitive and extropunitive responses to frustration, Fromm's (1947) description of destructiveness and withdrawal in social relationships, and Zigler and Phillips (1960) analysis of behavioural tendencies to turn against the self and to turn against others. Since clinical research focuses upon psychopathology rather than adjusted behaviour, these concepts emphasize less adaptive responses.

The possibility that emotion concepts, trait concepts, and diagnostic concepts might be integrated into a unified conceptual scheme was supported by Schaefer and Plutchik (1966). Experienced clinicians rated the extent to which specific diagnostic concepts implied a set of emotions and a set of personality traits. Statistical analyses of these judgements showed that emotion and trait concepts were integrated in a unified circumplex organization in which the basic emotions of fear and anger were at the negative poles of the two major dimensions. The diagnostic concepts, as well as the traits and emotions, were integrated by circumplex organizations that correspond closely to the circumplex organization of social adjustment as seen in Table 4.1.

Table 4.1. A circumplex organization of social adjustment concepts

	360°/0°	45°	90°	135°	180°	225°	270°	315°
Ackerson (1942)						Personality problems Over-inhibition		Conduct problems Unsocialized aggression
Hewitt and Jenkins (1946)								
Eysenck (1963)	Extraversion				Introversion		Neurosis	
Kassenbaum, Couch, and Slater (1969)	Extraversion	Social participation	Ego-strength	Intellectual control	Introversion	Withdrawal	Ego-weakness	Impulsivity
Peterson (1960)	Extraversion		Adjustment		Introversion		Mal-adjustment	
Peterson (1961)						Personality problems		Conduct problems
Schaefer (1961)	Extraversion	Friendliness	Love	Conformity	Introversion	Withdrawal	Hostility	Aggressiveness
Collins, Maxwell, and Cameron (1962)						Anxiety		Rebelliousness
Digman (1963)	Extraversion		Good Socialization		Introversion		Poor socialization	
Becker and Krug (1964)	Extraversion	Loving	Emotional stability	Submissive	Introversion	Distrusting	Emotional instability	Assertive

contd....

	360°/0°	45°	90°	135°	180°	225°	270°	315°
Baumrind and Black (1967)	Active	Stable	Responsive	Conformity	Passive	Unstable	Irresponsible	Non-conformity
Achenbach (1966)	Externalization				Internalization		Severe and diffuse pathology	
Rutter (1967)						Neurotic		Antisocial
Kohn and Rosman (1972)		Interest-participation		Cooperation-compliance		Apathy-withdrawal		Anger-defiance
Quay (1972)						Withdrawal		Aggression

Identification of a Dimension of Task-Orientation versus Distractibility

Despite the fact that task-oriented behaviour is involved in a high proportion of referrals to child guidance clinics, particularly referrals by the school system (Wender, 1971), that dimension has not been clearly identified in the research on social adjustment reviewed above. However, emphasis on task-oriented behaviour is emerging from research on minimal brain dysfunction, which Wender (1971) states is the most common disorder seen by child psychiatrists. Child behaviours which Wender related to minimal brain dysfunction include: short attention span, poor concentration, learning difficulties shown by poor school performance despite adequate intelligence, poor impulse control including low frustration tolerance and low perseverance, emotional lability, and antisocial behaviour. Although several of these concepts have also been included in the concepts of conduct problems, externalization, and antisocial behaviour, a cluster of hyperactivity, distractibility, low perseverance, and low concentration can be differentiated from anti-social aggression. A two-dimensional analysis of ratings that had factor loadings on a global dimension of adjustment-maladjustment revealed two independent factors: 1) distractibility, hyperactivity, work fluctuation, inappropriate talkativeness, low calmness, and low conscientiousness which was labelled low task-oriented behaviour and 2) cruelty, resentment, irritability covert hostility, and suspiciousness which was labelled hostility. Subsequent analyses of teachers' ratings of classroom behaviour confirmed the factor of hostility and defined the positive pole of the independent factor of task-oriented behaviour with scales of perseverance, conscientiousness, attentiveness, concentration, methodicalness, academic seriousness, and achievement orientation (Schaefer, 1971).

Many earlier studies did not identify a factor of task-oriented behaviour because those behaviours were not sampled. Studies identifying what appeared to be task-oriented

behaviours have assigned many different labels to them. For example, Smith (1967) isolated a factor which he labelled strength of character, which include major loadings for ratings of perserverance, responsibility, conscientiousness, self-reliance, and orderliness. The label autonomous achievement striving has been given to a similar set of behaviours by Beller (1959) and Digman (1972) has also identified a factor of industriousness which was highly correlated with high school grade point average. In addition, Douglas (1964) reports high correlations between ratings by teachers of perseverance and hard work in school and Miller (1972) has identified a dimension of need achievement versus task avoidance from ratings of classroom behaviour.

The dimension of task-oriented behaviour has been isolated from ratings of classroom behaviour by several different investigators. Perhaps the differentiation of hyperactive, distractible behaviour from hostile behaviour has been made more clearly from classroom data than from clinical data. Evidence that task orientation is correlated with academic achievement would justify including that dimension as a major component of social competence. Intelligence is also a major component of social competence that has been emphasized far more than task orientation in research on academic achievement and on social competence. The major dimensions of adjustment and competence discussed here are integrated into a hierarchical model for adaptation in Figure 4.1. The research reviewed suggests that each of these major dimensions of adjustment and competence should be included in comprehensive studies of socialization.

Negative extremes of the specific dimensions of the model for social adaptation might be associated with specific diagnoses, e.g., low intelligence with mental retardation, distractibility with minimal brain dysfunction, hostility with delinquency, and introversion and withdrawal with neurosis. Yet, the degree of statistical independence of the dimensions

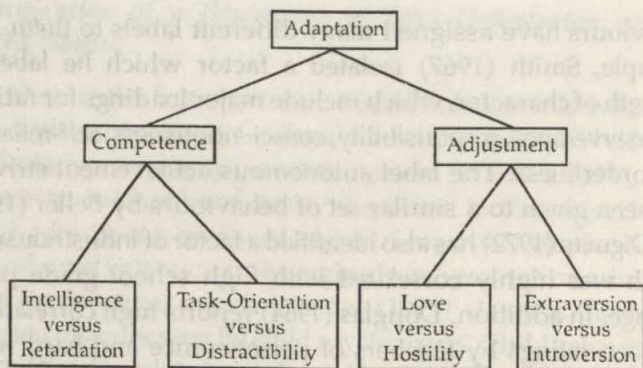


Fig. 4.1 A hierarchical model for adaptation

suggests that the negative extremes of the dimensions may coexist in the same person i.e., that a mentally retarded person might also be distractible, hostile, and withdrawn. Perhaps a fruitful direction for research on socialization and on mental retardation would be to investigate the antecedents and correlates of these major dimensions of adaptation.

Stability of Major Dimensions of Adaptation through Time

The importance of the early socialization of major dimensions of adaptation can be partially evaluated by the stability of the child's behaviour through time. If the child's behaviour shows great change through time, the social significance of early socialization would be reduced. The contrary conclusion, illustrated by Bloom's (1964, p.88) statement that "about 50 per cent of intellectual development takes place between conception and age 4 and about 80 per cent by age 8" has provided much of the motivation for research on early intellectual development. Examination of the evidence concerning early stabilization of child behaviour and alternative interpretations of those data will contribute to planning for both research and service programmes.

Bloom's summary of the evidence that intelligence stabilizes during the early years of life was derived from

longitudinal studies of children reared in their own families. Therefore those studies were not able to differentiate genetic influences from environmental influences or to differentiate the early environment from the continuing environment of the family. Studies of children who leave an initially depriving environment for a more stimulating environment suggest that major changes in environment can result in substantial increases in intellectual functioning, even in late adolescence or early maturity. Clarke and Clarke (1959) report mean IQ increases of 16 points from mentally retarded subjects during the 6 years after they left their severely depriving environments. Feuerstein (1970, p. 357) summarized the effects of a 4- to 6-year educational and training programme in an Israeli kibbutzim for immigrant youth with retarded development and concluded:

The achievements marked by the Youth Aliya wards in terms of quantity and quality can be considered as massive evidence that reversibility of severely retarded performance is an attainable goal, even at such a late stage as adolescence.

The extent to which intelligence tends to be stable in the absence of major changes in environment is suggested by correlations between 18-years and 40 years IQ's for Berkeley Guidance Study males of 0.74 and for females of 0.75 (Honzig, 1972). These correlations are substantially smaller than the stability of IQ scores for short time periods, suggesting that changes in functioning occur even during maturity.

Determination of the stability of a dimension of task-oriented behaviour is minimal due to the lack of consensus in conceptualization and measurement, the typical lack of differentiation of hyperactivity and distractibility from antisocial aggression, and the resultant lack of longitudinal studies. However, Digman's (1972) report for a sample from a university school that a factor of industriousness rated

during the first and second grade predicted high school grade point average with a correlation of 0.51 suggests that these behaviours may stabilize early. Similarly, Wender's (1971) discussion of the minimal brain damage (MBD) syndrome, which prominently includes distractibility, indicates that early symptoms of this syndrome suggest a poor prognosis at maturity. He further indicates that Robins' (1966) follow-up of acting out psychiatric clinic patients may be relevant to the prognosis of MBD since, "many children having symptoms which overlap those seen in the MBD syndrome developed a variety of serious psychiatric disorders, while children with symptoms unlike those seen in MBD did not develop such disorders."

Studies by Robins (1966) and Roff (1971), as well as Robins' (1972) review of follow-up studies of behaviour disorders of children, show that antisocial, aggressive children have a relatively poor prognosis for recovery from illness and for adult outcome. Roff's studies have shown that both rejections and discharges from military services for psychiatric or behaviour problems can be predicted by delinquent behaviour found in case histories from child guidance clinics of 8- to 12-year old children. In addition, Robins (1966) found that cases of antisocial behaviour from child guidance clinics showed a variety of maladaptive behaviours as adults.

In contrast to the poor outcome of antisocial behaviour, a number of follow-ups of clinic patients with neurotic disturbances show relatively high rates of recovery (Cunningham, Westerman, and Fischhoff, 1956; Masterson, 1958; Warren, 1965; Robins, 1966). Summarizing her work, Robins (1972, p. 437) states

... poor outcomes were largely confined to antisocial children Indeed, children seen for neurotic disturbances had almost as good adult adjustment as had normal school children selected for freedom from school problems. . . .

Robins (1972) also states that, "no childhood variables, neither the child's behaviour problems nor his family type, predicted adult neurosis."

This cursory examination of the stability of major dimensions of adaptation suggests that three dimensions, low intelligence, low task-oriented behaviour, and hostility or antisocial aggression, tend to be predictive of the child's future adaptation, while the dimension of introverted, inhibited, neurotic behaviour has a more favourable prognosis. Since much of the existing research has been on psychiatric clinic populations, longitudinal studies of more representative samples are needed to determine the significance of lesser degrees of maladaptation during childhood.

Conceptualization of Family Variables that Influence Socialization

An analysis of major characteristics of the parent's interaction with the child may justify the focus of this chapter as to family influence upon socialization. As contrasted to other institutions, the family's *priority* in influencing the child's early socialization is complemented by the *duration* and by the *continuity* of that influence, and by the total *amount* of interaction and care. These characteristics of family care are related to the *extensity* of sharing in many different situations, the *intensity* of involvement and affect, and the *pervasiveness* of the parent's influence upon the child's total experience with society. The degree of parental influence is also related to the *consistency* of the patterns of parent-child interaction, the great *variability* in parental care, and the *responsibility* for child care that is assigned to the family by society (Schaefer, 1972). The early, continuing, and cumulative influence of parental care, as contrasted to care provided by professionals, is shown by these characteristics.

A model of early parent-child interaction and of the parent's influence upon the child's interaction with other persons, objects and activities is reproduced in Figure 4.2

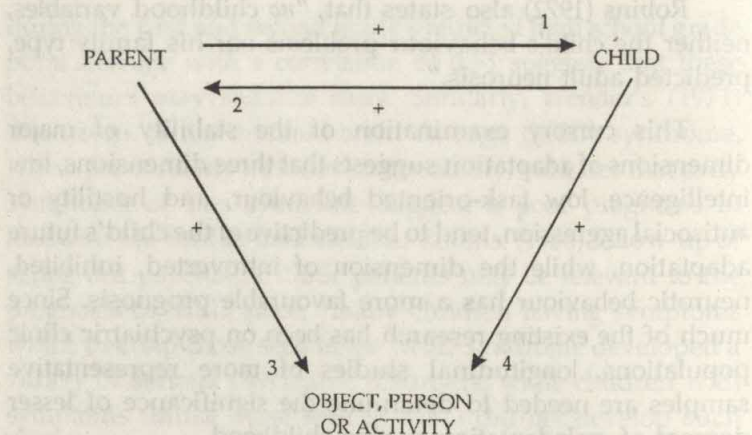


Fig. 4.2. A model for early parent-child interaction, socialization, and mediated learning.

(Schaefer, 1970). The first stage of the socialization process, which is often omitted in psychological analyses, is the parent's development of a positive attachment to the child. Thus, an analysis of factors that block parental attachment to the child would contribute to an analysis of factors impeding the socialization process. In the second stage, the child develops a positive attachment to the parent. More emphasis in recent research upon the child's response to the parent is a needed complement to research emphasizing the parent's response to the child (Bell, 1968; 1971). In the third stage, the parent and child together engage in an activity, with an object or with another person. Through these shared activities the child may develop new relationships, interests, skills, and task-oriented behaviours. Thus, the model outlines the development of mediated learning experiences which Feuerstein (1970) suggests are the most significant impetus to intellectual development.

The degree of importance attached to parent behaviour as an antecedent of child development has led to numerous attempts to develop detailed conceptualizations of such

behaviour. The diversity of conceptual schemes and of methods has led to attempts to develop major concepts or dimensions that would include many different parent behaviours. Symonds (1939) was among the first to attempt integration of empirical studies of parent-child relationships into a two-dimensional conceptual model of acceptance-rejection and dominance-submission. A second order factor analysis of the Fels Parent Behaviour Rating Scales by Lorr and Jenkins (1953) anticipated later three-dimensional models by the isolation of three major factors of democracy in child training, dependency-encouraging, and organization and effectiveness of control. From her clinical insights, Roe (1957) developed a hierarchical circular model for parent behaviour that included a major dimension of loving versus rejecting and a second dimension that emphasized high or low emotional concentration upon the child. She also suggested concepts for combinations of the two major dimensions, e.g., the concept "over-protective" was shown as a combination of loving with high emotional concentration as contrasted to "neglecting" which was shown as a combination of rejecting with low emotional concentration.

From a factor analysis of a set of maternal behaviour ratings, Schaefer (1959) developed a two-dimensional circumplex model for maternal behaviour. The model included major dimensions of love versus hostility and autonomy versus control. Becker (1964), from parent behaviour ratings that included some of the Fels scales, developed a three-dimensional model of warmth versus hostility, anxious emotional involvement versus calm detachment, and restrictiveness versus permissiveness. A factor analysis of the Child Report of Parent Behaviour Inventory (Schaefer, 1965a) generated a very similar three-dimensional model with dimensions of acceptance versus rejection, psychological control, and lax control versus firm control. Roe and Siegelman (1963) also reported three dimensions of loving-rejection,

overt attention, and casual-demanding. In addition, Siegelman's factor analysis (1965) of another method of collecting children's perceptions of parent behaviour resulted in three factors of loving, demanding, and punishment.

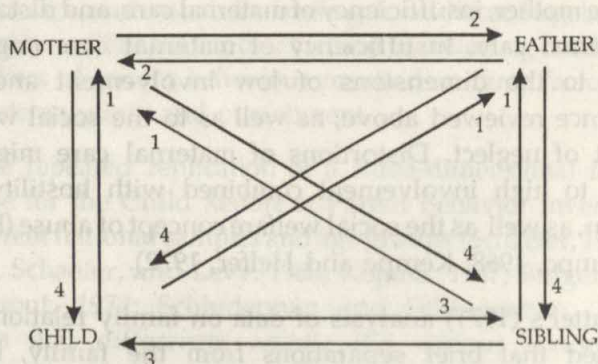
The repeated replication of a three-dimensional factor structure for the Child Report of Parent Behavior Inventory for different national samples and age groups (Schaefer, 1965b; Renson, Schaefer, and Levy, 1968; Kojima, 1967; Burger and Armentrout, 1972; Schluderman and Schluderman, 1970) suggests that differences among the various conceptual schemes are probably due to differences in conceptualization and measurement. Despite these differences, all two- and three-dimensional analyses of parent behaviour have identified a major dimension of acceptance, democracy, love and warmth as contrasted to hostility and rejection. The two-dimensional analyses have identified dimensions of dominance-submission, emotional concentration, and autonomy-control. The three-dimensional organizations differentiate a dimension of control that has been labelled organization and effectiveness of control, restrictiveness versus permissiveness, and lax control versus firm control from a dimension of involvement that has been labelled dependency-encouraging, anxious emotional involvement versus calm detachment, psychological control, and demanding. The degree of convergence in these concepts suggests that three major dimensions of acceptance, control, and involvement can be identified in comprehensive samples of parent behaviour. Perhaps these dimensions might also be isolated in comprehensive studies of other dyadic relationships.

Despite the convergence in empirical psychological studies of parent behaviour, those studies have had little influence in another research tradition that stems from Bowlby's (1951) work on maternal deprivation. Much of the early research that contributed to analyses of maternal deprivation was summarized by Ainsworth (1962), who differentiated three aspects of maternal deprivation: separation

from the mother, insufficiency of maternal care, and distortions of maternal care. Insufficiency of maternal care might be related to the dimensions of low involvement and low acceptance reviewed above, as well as to the social welfare concept of neglect. Distortions of maternal care might be related to high involvement combined with hostility and rejection, as well as the social welfare concept of abuse (Helfer and Kempe, 1968; Kempe and Helfer, 1972).

Rutter's (1971) analysis of data on family relationships suggested that brief separations from the family, if not accompanied by persistent family tension and/or negative relationships, may have minimal long term effect upon the child's socialization. His analysis of family relationships also significantly broadened the focus of research on deprivation by finding that the husband-wife relationship, as well as the father-child and mother-child relationship, is significantly related to the social adjustment of sons. By combining data on husband-wife, father-son, and mother-son relationships, Rutter found relatively high correlations with sons' antisocial, delinquent behaviour. Inclusion of several family relationships in prediction of the adaptation of the child would significantly broaden the focus of current psychological research on socialization. This research has previously had a primary focus on mother-child relationships, a minor secondary focus on the father-child relationship, and an almost total neglect of husband-wife relationships (Mussen, 1970).

Recent family research suggests the need to study the entire network of family relationships among father, mother, child, and sibling shown in Figure 4.3. Integrated studies of the entire network of relationships would investigate Burgess' (1926) concept of the "family as a unity of interacting personalities" and would contribute to the "psychological study of whole families" advocated by Handel (1965). Although earlier research has focused upon maternal behaviour with the child, more studies are analyzing the effects of



1. Child Report of Parent Behavior Inventory (Schaefer, 1965);
2. Communication in Marriage Inventory (Schaefer and Phillips, Unpublished);
3. Sibling Behavior Inventory (Aaronson and Schaefer, Unpublished);
4. Child Behavior towards the Parent Inventory (Schaefer and Finkelstein, Unpublished)

Fig. 4.3. A network of family relationships: inventories of perceptions by family members. 1. Child Report of Parent Behavior Inventory (Schaefer, 1965); 2. Communication in Marriage Inventory (Schaefer and Phillips, Unpublished); 3. Sibling Behavior Inventory (Aaronson and Schaefer, Unpublished); 4. Child Behavior towards the Parent Inventory (Schaefer and Finkelstein, Unpublished)

paternal behaviour upon the child (Biller, 1970; Radin, 1972; 1973). Indicating that child behaviour also influences parent behaviour, Bell's (1968; 1971) reviews have integrated earlier research and have stimulated additional study. The controversy about the direction of influence from parent to child or vice-versa suggests that more detailed analyses of the circular interactions of parent and child will contribute to an understanding of family relationships. Research on relationships among siblings (Sutton-Smith and Rosenberg, 1970; Bowerman and Dobash, 1974) is also needed to understand family relationships. Although research on the triadic interaction of mother, father, and child may be most fruitful in investigating the socialization of the individual child, studies of differences in the family relationships of

siblings will contribute to the understanding of the antecedents of different parental behaviour with different children.

Although the entire network of family relationships of Figure 4.3, apart from clinical case studies, has not been studied simultaneously, a set of inventories has been developed for the multivariate measurement of each of these relationships.

The validity of children's perceptions of parent behaviour, shown by correlations with other data on parent behaviour (Schaefer and Bayley, 1967), and the reliable measurements and clear factor structures that have been found for each of the vectors of Figure 4.3 open up a broad field of research on family relationships and socialization.

Relationships of Family Variables to Major Dimensions of Child Behaviour

Theories of Socialization: Processes and Mechanisms

Several theoretical explanations of the socialization process have been developed, with many of them focusing upon explanations of parental influence upon child development. An analysis of how different theories of socialization might explain the influence upon child behaviour of the most pervasive dimension of parent behaviour, parental love, warmth, and acceptance versus hostility and rejection, will indicate that the different theories do not contradict, but rather complement one another. This analysis will support the conclusion derived from empirical research that major dimensions of parent behaviour have a significant effect upon major dimensions of child behaviour.

Developmental identification or *anaclitic identification* suggests that the child is socialized because of his attachment to a rewarding and nurturant parent (Mowrer, 1950; Mussen, 1967). Thus, parental warmth, love, and acceptance would increase the effectiveness of this process in socializing the child. Evidence for this theory includes Mussen and Distler's (1960) and Mussen and Rutherford's (1963) findings that

affectionate, warm fathers and mothers had more approximately sex-typed boys and girls.

Bandura (1962; 1970) has shown that many of the phenomena included under the concept of identification can be explained by *modelling*, imitation, or incidental learning. Ample experimental evidence has been provided that modelling can influence both aggression (Bandura, 1970) and pro-social behaviour (Bandura, 1969; Rosenhan, 1972). Thus, it is reasonable to assume that consistent loving or hostile parent behaviour will lead to similar behaviour patterns in the child.

Reinforcement of specific behaviours also has a major effect upon child behaviour. Research on the effects of training parents to modify the behaviour of their children has influenced many clinical programmes directed at both parents and teachers (Brown, 1971; Johnson and Katz, 1973). Parents who are more warm, accepting, and loving apparently perceive and reinforce more positive behaviours of their children than hostile and rejecting parents. Patterns of positive reinforcement may partially explain the success of parental acceptance in socializing the child.

Mediated learning (Feuerstein, 1970) may contribute both to cognitive learning and to other socialized behaviour through shared experiences of parent and child. If the parent has a positive relationship with the child and with another person, the parent can mediate the child's development of a relationship with the other person. The positive affect, the enriched experience, and the skills developed through shared experiences with a warm, accepting parent may be related to the other processes of identification, modelling, and reinforcement.

The concept of identification with the aggressor suggests that fear may also lead to the child's identification with the hostile, aggressive parent. Such an identification might lead to hostility directed toward other weaker persons. Mussen (1967)

has interpreted his own research as providing some evidence for this process, but as providing more evidence for developmental identification with the nurturant parent.

The frustration-aggression hypothesis (Dollard et. al., 1939) that has influenced much of the research on aggression has been reviewed in depth by Zigler and Child (1969) and Feshback (1970). Clearly, a hostile, rejecting parent would frustrate many of the social and emotional needs of the child. From their review of the evidence Feshbach and Feshbach (1972) state:

It would appear . . . that the frustration-aggression hypothesis best applies to particular types of children as well as to particular types of frustrating experiences, and that one cannot assume that frustration necessarily increases aggressive tendencies in all children at all times.

Levy's (1937) concept of *primary affect hunger* arising from early deprivation is most clearly supported by studies of children reared in institutions (Goldfarb, 1945; Pringle and Bossio, 1958). However, it may also apply to the acting-out behaviour of neglected and rejected children reared in families.

This brief discussion suggests that the effects of warm, loving, accepting parent behaviour upon the socialization of children might be explained by a combination of the processes of *developmental identification, modelling, reinforcement, and mediated learning*, while the effects of hostile, rejecting parent behaviour might be explained by the mechanisms of *identification with the aggressor, frustration-aggression, and primary affect hunger*. Perhaps the relevance of these processes to the child's hostile, aggressive behaviour is most apparent. However, the effects of modelling, reinforcement, and mediated learning might also influence the child's intellectual development and task-oriented behaviour. The effects of parental involvement and control upon child behaviour might also be interpreted

through these processes of socialization. However, the changing needs of the child from birth to maturity, from a need for high involvement during infancy to a need for autonomy at maturity, as well as the varying appropriateness of parental control at different ages, do not allow a brief discussion of those issues. The apparent stability of the parent's love and acceptance versus hostility and rejection from infancy to adolescence (Schaefer and Bayley, 1960) and the pervasive effects of this dimension upon the process of socialization may explain the correlations of parental acceptance versus rejection with major dimensions of child behaviour.

Schaefer and Bayley's (1963) finding that a dimension of maternal love versus hostility, identified during infancy, predicts sons' task-oriented behaviour in the mental test situation would also support a relationship between parent variables and task-oriented behaviour. Findings by Goldfarb (1945) that children reared in institutions have little impulse control, frustration tolerance, or goal directedness have been confirmed by Pringle and Bossio (1958). Despite these indications that early rearing may have a powerful effect upon task-oriented behaviour, clinical studies of hyperactive, distractible children (Keogh, 1971; Fish, 1972; Weiss et. al., 1972) show a number of other possible antecedents. From a study of twins, Willerman (1973) presents evidence that hyperactivity may be inherited, and Wender (1971) stresses biological rather than social psychological antecedents of minimal brain dysfunction. Further study of the dimension of task-oriented behaviour is necessary to clarify the importance of different factors. However, behaviour modification studies in classrooms suggest that reinforcement can change these behaviors. Perhaps parental modelling, the child's identification with the task-oriented parent, mediated learning experiences, and parental reinforcement are important environmental influences even though brain damage and genetic differences also influence the child's hyperactivity and distractibility.

The literature on antisocial aggression and delinquency is clear in finding a related family background of both maternal and paternal rejection and hostility, particularly for sons (Hewitt and Jenkins, 1946; Lewis, 1954; Glueck and Glueck, 1950; Andry, 1960; Rutter, 1971). Achenbach (1966) found that parents of externalizers show a history of divorce, psychiatric problems, criminality, alcoholism, unemployment, desertion, having illegitimate children, and charges of child neglect. This is paralleled by Robins and Lewis' (1966) and Roff's (1971) findings that antisocial behaviour of parents is related to antisocial behaviour of sons. Robins and Lewis (1966) found this relationship in both white-collar and blue-collar families and also reported that the greater the number of antisocial relatives, the greater the effect upon the boy. The several different socialization process of modelling, identification, reinforcement, identification with the aggressor, and frustration-aggression might be used to interpret these findings.

Rutter's (1971) report that marital tension and conflict are related to antisocial behaviour of sons is paralleled by Kimmel and van der Veen's (1974) finding that reports by husband and wife of low compatibility in marriage are related to the child's aggressive behaviour. Reviews of research on aggression (Feshbach, 1970; Feshbach and Feshbach, 1972) would also support a conclusion that parental hostility and rejection are related to the child's aggression and delinquency. Rutter's (1971) report on family relationship antecedents of delinquency refers almost entirely to data for boys. Perhaps the high boy to girl ratio for delinquency (Jenkins et al., 1966) is caused by a greater tendency for sons to respond to family hostility and rejection with antisocial aggression.

Achenbach (1966) reports that parents of internalizers show greater involvement with the child than parents of externalizers, but does not compare his groups with normal children. Levy (1943) reported more submissiveness, passivity,

timidity, and poor peer relationships for children of dominating overprotecting mothers, and Hewitt and Jenkins (1946) found more overinhibited behaviour in children associated with parental repression. Jenkins et al. (1966) also concluded that neurotic, overanxious children have close ties to overanxious, neurotic mothers. Corresponding to Jenkins' findings, Hagman (1932) reports correlations between the mother's and the child's fears as reported by the mother. Through processes of identification, modelling, and reinforcement, parents may influence the fearful, anxious, neurotic behaviour of their children. However, the conflicting findings, as contrasted to the clear correlations of family functioning with hostility and delinquency, suggest that more subtle and detailed studies are needed to correlate family functioning with neurosis.

Regarding the antecedents of introversion-extroversion, twin studies indicate that this dimension may be highly heritable (Vandenberg, 1967). Relatively high consistency of active, extroverted behaviours through time (Kagan and Moss, 1962; Schaefer and Bayley, 1963; Tuddenham, 1959) and low and inconsistent correlations between ratings of introversion versus extraversion and ratings of parent behaviour (Schaefer and Bayley, 1963; Becker and Krug, 1964) also suggest that introversion-extraversion may be influenced more by genetic than environmental factors.

This discussion has emphasized family influence upon major dimensions of child adaptation. However, intelligence is influenced by heredity and neurological impairment as well as environmental variables. On this issue, Werner, Bierman, and French (1971) state that family environmental factors show far more correlation with IQ scores than perinatal stress factors. Scarr-Salapatek (1971) reports that heritability estimates for intelligence may be different for low socioeconomic groups than for high socioeconomic groups. This suggests that proportions of variance related to genetic and environmental factors may be different depending on the population.

Similarly for the dimension of task-oriented behaviour, heredity and neurological impairment as well as environmental variables appear to be important antecedent variables. Perhaps the clearest evidence of family influence upon socialization is shown for hostile, delinquent behaviour and the least evidence for a dimension of introversion-extraversion. However, the importance of the family in the socialization process justifies an examination of the factors that may influence the family's ability to socialize the child despite the evidence that neurological impairment and/or genetic differences may be related to individual differences in intelligence, task-oriented behaviour, and introversion-extroversion.

Identification of Variables that Influence Family Functioning

Social Stresses and Social Supports

An analysis of the stresses and supports that influence family functioning may contribute to prevention of problems in socialization. Leadership in such an analysis has come from clinical investigators, perhaps because of their responsibility for coping with the problems of child and family. For example, Helfer and Kempe (1968) initially analyzed factors that contributed to battering and then reported methods for helping the battered child and his family (Kempe and Helfer, 1972). Although an exhaustive analysis of the social stresses and supports that influence family functioning would be desirable, only a few studies will be reviewed that illustrate the importance of these factors.

Gordon and Gordon's (1959) review of the social factors that predict emotional disturbance of the mother during the first 4 months after delivery found many predisposing factors in the family of origin, including family history of emotional disorders, divorce or separation, and homes broken by death of a parent. Characteristics of the woman that have been found predictive include greater tendency of serious physical illness, previous personal emotional disorders, more physical

complications of pregnancy, unplanned pregnancies, and 33 years or older at the time of emotional upset. Lack of social supports contributing to emotional disturbance included husband's frequent unavailability and less other help in the first weeks after return home from the hospital. Gordon and Gordon's study (1959) supported a conclusion that:

A definite trend appears for parents with few environmental strains to respond without undue emotional upset, while those with many environmental difficulties tend to react with considerable emotional upset.

To potential effectiveness of family variables in predicting serious illness and, presumably, maternal care is shown by a study of low birth weight infants by Glass, Kolko, and Evans (1971). Initially an index was developed to predict rehospitalization or death of premature infants. This index included failure to attend to parental care, absence of father, receipt of public assistance, and one or more siblings at home. These variables were related to utilization of the follow-up clinic and also predicted rehospitalization or death of the child. Utilization of the prognostic index on a second sample yielded a rehospitalization rate of 11.4% for women with low scores, but 41.7% for women with high scores. This was essentially the same differentiation that was found for the initial sample. The predictive index is being used by the authors "to identify low birth weight infants at highest risk of serious illness and rehospitalization . . ." in order to provide more thorough medical supervision for those infants.

Elmer's (1967) study of abusive and nonabusive mothers found that marital difficulties, household disorganization, and lack of associations outside the home differentiated the two groups significantly. Elmer also reported a set of childbearing and family structure variables significantly more characteristic of mothers of abused children. These include: three or more children at the time of admission of the abused child, mother less than 21 years of age, the abused child conceived out of

wedlock, less than 1 year intervening between the births of the children in the family, the mother pregnant at the time of admission, and the birth of a sibling less than 1 year before the time of admission. Perhaps the stresses of childbearing and childrearing reduce both the amount and quality of maternal care. This hypothesis is supported by Douglas' (1964) study, which found a number of indices of family care and education of the child negatively related to family size, even after controlling for social class.

Giovannoni and Billingsley (1970) have confirmed some of the characteristics of less adequate families in a study of low income white, black, and Spanish-speaking mothers. The subjects were adequate and potentially neglectful mothers nominated by public health nurses and neglectful mothers known to Protective Services. Among the findings were that adequate mothers had fewer children than the potentially neglectful or neglectful in all social groups. Neglectful families more frequently had only one parent, while the adequate families more frequently had two parents. A higher incidence of extreme poverty was found in the neglectful group as well as fewer material resources such as adequate housing, telephones, and automobiles. For the black and white women, daily contact with relatives was more characteristic of the adequate mothers, and the adequate mothers were more often engaged in church activities. Giovannoni and Billingsley (1970, p. 332) conclude:

In sum, the low-income neglectful parent is under greater environmental and situational stress and has fewer resources and supports in coping with these stresses than does the adequate mother. It is the current situational strains that predominate among neglectful parents, not those of their past life.

Schaefer (1959) reported correlations between marital conflict, financial distress, and poor physical health of mothers

and ratings of maternal hostility and rejection within a more representative community sample. Studies done by Bayley and Schaefer (1960) and Milner (1951) also report correlations between socioeconomic status and maternal behaviour, and Hess (1970) has reviewed the correlations of socioeconomic status and ethnic group with child care. Perhaps many of the differences in parental care between social groups are related to differences in social stresses and social supports, which tend to be correlated with socioeconomic status and minority group status. However, just as family process variables seem to be better predictors of child development than socioeconomic status, family stress and support variables may be better predictors of parental care than ratings of socioeconomic status.

Evidence has been cited that the number of children in the family may be a stress that reduces the adequacy of parental care (Douglas, 1964) or increase the probability of neglect and abuse (Elmer, 1967; Giovannoni and Billingsley, 1970). From clinical studies it also seems probable that characteristics of the children, by the stresses they place on family resources, may also influence the adequacy of family care (Glass et. al., 1970; Elmer, 1967; Klaus and Kennell, 1970). In an interview study of mothers of mentally retarded children, Schonell and Watts (1956) found that the child's condition affected family plans, caused difficulties in obtaining schooling or training for the child, curtailed family social activities, and seemed related to emotional disturbances in family members. Stresses upon the family caused by the presence of the mentally retarded child have also been recognized by Kershner (1970) and by Stone (1967).

Professional Support for Family Functioning

In the presence of many stresses and few social supports, to what extent can parents obtain consultation, support, and assistance from the professions and institutions that relate to

children and families? Schonell and Watts (1956) found that 32 of 50 mothers of mentally retarded children reported they had received no outside help in the care of their child, although 37 reported they had the support and encouragement of the rest of their family. Thirty-three reported they would like more information on the cause, treatment, future prospects, and other aspects of the child's condition. In contrast, Fowle (1968) studied families whose children were enrolled in centres for the mentally retarded and from her study of marital integration speculated "that the availability and utilization of community centres for the retarded may be contributing to a substantial extent to the harmony and integration of the marriage of the parents of the children served." Stone (1967) also found that: "Active participation in parents' organizations was associated with both accurate knowledge about mongolism and willingness to care for the retarded child in the home." Studies of random samples, rather than self-selected samples, of parents receiving services are needed to demonstrate the effectiveness of these supports.

Not only parents of retarded children but also unselected samples of middle class parents may receive little help from professionals. Chamberlin (1974) interviewed 190 mothers of 4-year olds who were receiving pediatric care for their children. Of the mothers who identified a conflict with the child and/or a concern about the child, approximately 81 to 84% had not talked to a professional about the problem, and a maximum of 15% had talked with the pediatrician. Fifty-one per cent of the mothers who identified their children as having a definite behavioural or emotional problem had not talked to a professional about the problem. Thirty-three per cent had talked with the pediatrician, and the remainder had talked with either a teacher, a social worker, or psychiatrist. Of the mothers who had talked with the pediatrician, 60% saw the interactions as very helpful, and only 20% found the interactions of little or no value. These results suggest that middle class parents are receiving little assistance from professionals, but that the assistance received is often helpful.

In investigating professional support for parents, Stine (1962) found very little discussion of child behaviour and development in 673 well child visits with 42 physicians. Similarly, Starfield and Barkowf (1969) reported that mother's questions about child behaviour in well baby visits were often unacknowledged and unanswered. Further analyses of the barriers that reduce the support for family care would help in understanding findings such as these.

Thus far the discussion of factors that influence family functioning has suggested that many different stresses, including the stresses of frequent, closely spaced children and those associated with rearing a handicapped child, may predict problems in childrearing. Similarly, the lack of social supports, from one's spouse and extended family and community, apparently contributes to inadequate child care. Some evidence that middle class parents receive little assistance from the professions and abundant evidence that lower class parents receive even less indicate that current professions and institutions offer little support for family functioning. Examination of parent-centred early intervention programmes designed to provide training and support for parental care suggests that a change in policies and practices by health, education, and child care professions could significantly influence family care and education and could have more positive effects upon child development.

Intervention Research on Professional Support for Family Functioning

Evidence from intervention research indicates that positive maternal attachment to the infant may develop and stabilize in the first days or weeks of life. In animal studies, it has been found that separation of a mother goat from her kid during the first day of life often results in inadequate maternal care (Hersher, Moore and Richmond, 1958). Converging evidence also suggests that separation of mother and infants in

intensive care may be related to failure-to-thrive and child abuse (Fanano, Kennell, and Klaus, 1972). The possibility that current amounts of mother-infant contact at the time of birth, even for normal infants, may be reducing the amount of positive maternal attachment to the child motivated a study by Klaus et al., (1972). In this study the amount of mother-infant contact was increased to 1 hour during the first 3 hours after birth and to at least 5 hours each day during the first 3 days while a control group received the usual low level of contact. A follow-up with an interview and observations of the physical examination and of feeding the infant at 1 month of age showed highly significant differences between groups, with the increased contact group showing much greater positive involvement than the usual hospital routine control group. The study suggests that changing hospital policies and practices might have significant effects on maternal behaviour. The question might be asked whether separation of the father from the mother and infant during this period might also significantly influence mother-father-child interaction. In addition, the study raises the important question of whether the professions, in supplementing parental care through direct care of the child, might not also be implicitly supplanting family care of the child. On the other hand, the health professions potential for contributing to family functioning is suggested by the positive results of a programme conducted by a pediatrician and public health nurse that was designed to strengthen and support family care and education of the child (Gutelius et al., 1972).

The positive effects of parent-centred early education programmes have been reviewed by Lazar and Chapman (1972), who conclude:

Consideration of the results of all four of the studies in which the effects of schooling for the child, home visits, and parent meetings were compared, either singly or in combination, reveals the following: in each of the four studies parent involvement, with or without a preschool

component, resulted in more beneficial effects on children's language or intellectual development or academic achievement and on parents' IQ feelings, attitudes, or life style than the school component only.

Lazar and Chapman (1972) report that the parent-centred approach appears to be more effective even during first grade:

In the project sponsored by Mobilization for Youth, the first grade children whose parents were trained one hour per week to read to their children scored higher on nine different reading tests than did matched children who received special schooling—two hours of remediation per week from professionals—or a control group receiving no intervention.

Other studies show that parent-centred early education programmes (Levenstein, 1970; Karnes et al., 1970; Gray, 1971) have greater long term effects upon the target child, influence the development of younger children in the family, and are less expensive than child-centred early intervention programmes (Schaefer, 1972; Schaefer and Aaronson, 1972).

The success of the programmes that strengthen rather than supplement family care and education suggests the need to examine the current policies and practices of the professions and institutions that relate to families and children. Apart from the activities of parent-centred early intervention programmes, both health and education professionals working in hospitals, clinics, and schools appear to devote most of their attention to direct involvement with the child. Much less attention to professional-parent interaction and to the roles of professionals in supporting and strengthening parent involvement with the child is given in traditional training programmes, policies, and practices than to the direct care and

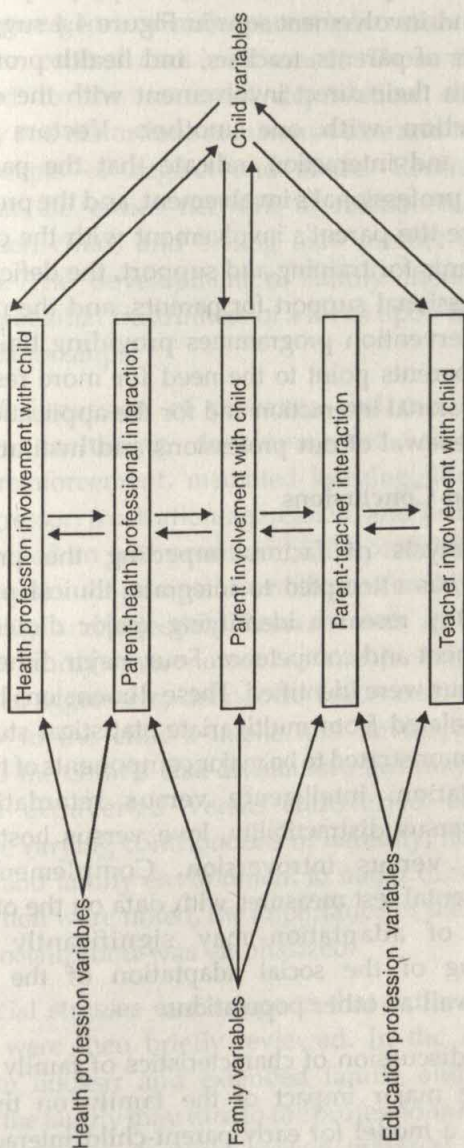


Fig. 4.4 A model of parent-professional-child interaction.

education of the child. The model for parent-professional interaction and involvement seen in Figure 4.4 suggests that characteristics of parents, teachers, and health professionals influence both their direct involvement with the child and their interaction with one another. Vectors between involvement and interaction indicate that the parent may influence the professional's involvement, and the professional may influence the parent's involvement with the child. The needs of parents for training and support, the deficiencies in current professional support for parents, and the promising results of intervention programmes providing training and support for parents point to the need for more research on parent-professional interaction and for the application of that research to renewal of our professions and institutions.

Summary and Conclusions

The analysis of factors impeding the process of socialization has attempted to integrate clinical psychiatric and personality research identifying major dimensions of child adjustment and competence. Four major dimensions of child behaviour were identified. These dimensions have been repeatedly isolated from multivariate statistical studies and have been demonstrated to be major components of the child's social adaptation: intelligence versus retardation, task orientation versus distractibility, love versus hostility, and extraversion versus introversion. Complementing the traditional mental test measures with data on the other three dimensions of adaptation may significantly increase understanding of the social adaptation of the mentally retarded as well as other populations.

After a discussion of characteristics of family care that result in the major impact of the family on the child's socialization, a model for early parent-child interaction was developed which emphasized the contribution of that interaction to socialization and to mediated learning of the

child. A review of psychological research on parent behaviour suggested convergence on major parent behaviour dimensions of acceptance, control and involvement. Those dimensions were related to the maternal deprivation concepts of insufficiency and distortions of maternal care and to the social welfare concepts of neglect and abuse. Recent research suggests that the entire network of relationships among mother, father, child, and sibling may predict the child's socialization. The development of family therapy would support the potential fruitfulness of a focus upon the network of family relationships.

A brief discussion of processes and mechanisms of socialization including developmental identification, modelling, reinforcement, mediated learning, identification with the aggressor, frustration-aggression, and primary affect hunger preceded an interpretation of the probable effects of a major dimension of parental warmth, love and acceptance, versus hostility and rejection. Research was reviewed that suggests that family environment has a major impact on the child's hostile, aggressive, delinquent behaviour; contributes substantially to the child's intellectual development; may contribute to the child's task-orientation; but may have less effect upon extraverted versus introverted behaviours. Although the varying contributions of heredity, neurological impairment and family environment to major dimensions of child adaptation were noted, the importance of the family for the child's socialization was emphasized.

The social stresses and supports that influence family functioning were then briefly reviewed. In the absence of support from nuclear and extended family and from the community, the family may turn to the professions for support and assistance. Often families receive minimal help from professionals and at times the professions and institutions may even be counterproductive. In an effort to supplement

family care, professional policies and practices may supplant family care, reduce parental attachment and involvement in the child's care, and have negative effects upon the process of socialization. On the other hand, experimental programmes designed to strengthen and support family care of the child appear to be more cost effective than child-centred programmes. Finally, the results of those programmes suggest the need to examine the roles of the professions and institutions dealing with children and with families, to study their interaction with parents, and the extent to which they supplement and supplant or strengthen and support family care of the child.

5

PROBLEMS OF SEVERELY MENTALLY RETARDED CHILDREN

Generally, social scientists regard families with severely retarded children as curiosities. Focusing upon the mental retardation label, they try to ferret out ways in which families cope specifically with their stigmatized child and with the courtesy stigma which the parents themselves earn (Goffman, 1963). They view their task as that of identifying the peculiar modes of behaviour, the unique strategems employed by these families in reacting to stigma. But regarding families with severe retardates as curiosities ignores the fact that in most respects these families resemble others in the society. Most of their roles and values are drawn from and are sustained in a flow of events similar to that experienced by other families. Rather, the plight of the parents of retarded children stems from the necessity of handling various kinds of offensive situations associated with their offspring.

By focusing instead on the mobilization of the family to handle the continuing *offensive* situations and *offensive* behaviour, we can then study the dynamics of family interaction in trying to live with unpleasantness. Yet, not all families or family members find living with a severely retarded child equally offensive. There are variations in the sense of stigma, in the amount of time and energy demanded,

in the extent of family resources, in prior loyalties and commitments, and so on. These variations require more extreme adaptations on the part of some families (and some family members) than others. The presence of such differences in adapting to a retarded child evokes the question: how do families decide on how much they must change their mode of existence in order to permit their lives to be bearable?

As a means of suggesting directions of further research on families with retarded children, this chapter deals with this question of the extent of adaptation which families are prepared to undergo. The first section is concerned with assumptions about the adaptational process, the second section with a putative description of this process, and the third with the effect of the social context on the process of adaptation. The term adaptation, incidentally, is not to be confused with "adjustment" or "acceptance." It is used rather in the traditional sense in which social scientists have applied the term, that of creating means for dealing with functional problems, as a basis for cultural change.

Assumptions Regarding the Adaptational Process

This section will suggest some basic assumptions underlying the process of adaptation to problematic family situations. It will first present the principle of minimal adaptation as a basis for ordering changes in family relationships. Then following the lead of theories on social exchange (Goode, 1960), it will relate the principle of minimal adaptation to questions pertaining to role renegotiation. Afterward, it will outline a tentative progression of successive minimal adaptations.

The Principle of Minimal Adaptation

In the analysis of change in family interaction, one can make various alternative assumptions about the choice of adaptations by family members. One possible assumption is

that adaptations are capricious and depend mainly upon the power structure of the family. This, in one sense, is the assumption made in the stimulus-response approach. This assumption implies a basic family disorder in problem situations and a reliance for solutions, in the final analysis, upon the psychological make-up and resources of the family members. On the basis of this assumption, families in crisis have been variously characterized in terms of coping behaviour, adaptability, flexibility, need-response pattern, and patterns of behavioural influence. In the past, the stimulus-response approach has not yielded significant hypotheses regarding generic processes of family adaptations to crisis (Hill and Hansen, 1964; Geismar, 1961; Parad and Caplan, 1960).

A second alternative assumption is to regard the adaptational process as a "rational" means for attaining ends in family life. One then observes how the most and least rational families differ in their choice of action. This is an approach I used in applying a strategic games analogy to the study of families with severely retarded children. I was concerned with the conditions under which strategies of institutionalization versus home residence were effective in maintaining a high marital integration of the parents. This procedure assumed that high marital integration was the major end (the payoff) for all families. Although the rationality assumption is useful when 1) there is a limited number of strategies to be examined and 2) there is a general consensus about the importance of the characteristic regarded as the payoff, its utility is diminished when these conditions do not hold.

A third assumption, which will be explored in this chapter, is that of minimal adaptation. This assumption implies that, *ceteris paribus*, families will make as minimal an adaptation as possible to solve problems involving family relationships (or at least to create a situation making it possible to live with these problems). A family problem is regarded

here as any event or chronic situation which the family members collectively perceive as interfering with the successful attainment of their goals in family life. Ideally, before the onset of the offensive situation, family relationships had been sufficiently gratifying so that family members are reluctant to change their mode of living. I consider an adaptation to be any sustained change in roles, norms, or family interaction which family members make (individually or collectively) with the intention of effectively handling (either solving or living with) the offensive situation. The minimal adaptation assumption implies a *temporal* progression of adaptations from the simple to the complex, from the least disruptive to the potentially fully disruptive of family relationships. Since these adaptations represent means for counteracting a threat to the integrity of the family, members are not likely to resort to more extreme measures until those less risky have been tried. Especially as adaptations become more extreme, variations in the opinions of family members as to the appropriateness of adaptations may themselves generate additional family problems.

The idea of change as a series of successive minimal adaptations to a critical event, with each adaptation more profound in its influence than the preceding one, appears in various guises in sociological analysis. It is found in Nisbet's (1969, p. 270) "priority of fixity," by which he means "apart from all interferences and external impacts, social behaviour tends to remain fixed and unchanging." It is implied in models of stable equilibrium (Smelser, 1968, pp. 262-268), which involve eventual recovery to a steady state of functioning by a social system. Applied to a concrete event, the principle of progressive minimal adaptations had been invoked to explain the slow but extensive escalation of U.S. involvement in the Vietnamese conflict of the 1960's. Briefly, it is the position that as a general rule major changes do not occur precipitously, without a long buildup of preliminary adaptations which do not themselves produce the desired ends. Thus, in response

to a critical event, changes in family interaction may inch along, intruding upon different domains of interaction (possible imperceptibly), until a profound revision eventually occurs in the organization of interaction.

Role, Renegotiation, and adaptation

The principle of successive minimal adaptations involves a series of renegotiations of family relationships. If we assume that at any given time partners in a social relationship have negotiated a set of understandings, then any potential new allocation of time, funds, or hierarchy of loyalties must be pitted against old ones in revising commitments. The mechanism of renegotiation assumes an inelastic amount of time, economic resources, and hierarchy of loyalties. If these were elastic, they would not have to be renegotiated every time a new potential allocation presented itself. Since an acceptable arrangement of time and resources allocation and loyalty hierarchy would have been negotiated to begin with, people would be reluctant to give up the existing pattern of allocations without trading off. This renegotiate an existing pattern of allocations of time, resource, and personal loyalty commitments inhibits the speed and amount of negotiation that occurs.

Ordinarily, problematic situations either hit at one person's area of responsibility harder than at another's strike at different roles in different ways. A consequence of this differential effect on roles is that the cost of a crisis is greater for one family member than another. This person must then "purchase" a far larger reallocation of time, loyalty, or resource than is required by another family member as a result of this crisis. In this asymmetrical situation, the other family member may 1) demand an exchange of commitments equal to those given, which results in a "profit" or 2) reallocate time, resources, or loyalty as a "loan" to be repaid at some future time, or 3) give only that much commitment as is

appropriate to his own requirements in the crisis, sustaining an allocation deficit for the more affected person, or 4) provide the required allocation as a "gift" and expect nothing in return, treating the other as an object of one's unilateral action rather than as an interacting participant, or 5) negotiate an exchange which neither had anticipated earlier. I suggest that in an asymmetrical situation such as that just described, those persons less affected by the problem would tend to choose alternative 3, which maintains an allocation deficit for the more affected persons.

This choice of a minimal adaptation by the lesser affected persons sets the stage for later negotiation to balance allocation deficits in the family. As roles are renegotiated to eliminate these deficits for the more affected persons, those who are less affected may demand considerable compensation for their cooperation. For example, since the maternal role is most affected by the presence of a retarded child, the husband may be unwilling to reallocate his efforts without an increase in the wife's submissiveness or attentiveness. The process thus hinges upon the willingness of the lesser affected persons to renegotiate roles. The lesser affected persons are thereby in a strong position to define the major value orientations of the family.

At each phase of the adaptation process, the parents and siblings probably "test" their role arrangements on each other and on outsiders. Apparently, as long as the parents feel that they can manage the child's disability, they can regard themselves as competent to handle offensive situations. It is only as they come to regard themselves as powerless that their role bargaining ability would deteriorate (Voysey, 1972).

If interaction were uniformly intensive among all family members, one might anticipate that the family would progress as a unit through successive adaptations. However, because of variations in intensity of interaction, these phases refer more

to family dyads: husband-wife, parent-and-normal child, parent-and-retarded child, and sibling-sibling. The necessity of living with a retarded sibling or child may stimulate a variety of offenses in these relationships. As secondary issues arise within these dyads, subordinate progressions of successive adaptations are apparently generated. Whereas the initial series of adaptations may refer to the retarded child as a problem, in later phases the focus may be on difficulties between parents or on a disturbed sibling. Eventually, the issue of divorce as a possible adaptation may overshadow that of institutionalization of the retarded child. The secondary offenses created in renegotiating roles influence the direction of later adaptations. As in the case of kidney donors, persons may drift into adaptations. Having negotiated or stalemated on one offense they are ready for a next step on that issue without considerable deliberation (Simmons, Klein, and Thornton, 1973).

The Progression of Successive Minimal Adaptations

The previous paragraphs indicated that hypothetically, other things being equal, families start out with the most minimal adaptations to their problems and proceed to successively more extensive and drastic ones only when the simpler adaptations are not effective. This characterization of family adaptation to crisis suggests the need to identify adaptations along a continuum from the most minimal to the most extensive and then to determine the extent to which families do indeed follow this sequence in reacting to critical events. One would anticipate, as a general principle, that the families would stabilize a mode of adaptation when the solutions developed are, at least in their view, inoffensive. Otherwise, the adaptational process would continue until the family units dissolved. What follows below is, of course, an ideal progression of adaptations to crisis and cannot apply to all empirical situations. The manner by which various conditions may affect this process will be discussed later.

Assuming the principle of successive minimal adaptations, one can postulate a process in terms of the phases outlined below. At any stage, if the kind of adaptation is effective, the family would cease seeking further adaptations to this problem, stabilize in its organization, and the crisis-meeting process would cease.

The progression of minimal adaptations in families with a severely mentally retarded child illustrates the effect which the presence of this child may have on family relationships. The successive adaptations include the following:

1. *Labelling phase*, in which the bases for the existing role arrangements are removed, and there is a realization that major understandings underpinning family relationships may have to be renegotiated.
2. *Normalization phase*, in which the family makes a pretense of maintaining its normal set of roles, all the while being considerate of each other for role lapses in an attempt to keep family life as normal as possible. The family presents a face of normality to the outside and seeks to maintain liaisons with the world of normal families.
3. *Mobilization phases*, in which the family members intensify the time and effort given to family demands, without, however, giving up their claim to normality as a family.
4. *Revisionist phase*, in which the family, in isolating itself from community involvements, can no longer maintain an identity of normality, and it revises age and sex standards in its organization of family roles. This revision represents an attempt to maintain cohesiveness in an uncaring and misunderstanding world.
5. *Polarization phase*, in which the family, finding itself unable to maintain its coherence in a complacent or

perhaps hostile world, turns its attention inward to seek the sources of this complacency or hostility within the family.

6. *Elimination phase*, in which the polarization eventuates in arrangements to preclude contact with the offending person himself. In this phase, the family seeks to renegotiate (with whatever resources remain) to regain those roles regarded as normal.

Phases in the Adaptational Process

The previous section outlined a series of putative phases in the adaptational process. It is difficult to determine from that outline the special features of each phase and the ways which these phases are related to recent research on families with deviant children. This section presents a more detailed discussion of these phases.

The continued presence of a severely retarded child in the home represents a dynamic set of problems rather than a static problem which the term "stigma" might imply. Even in so-called normal families, relationships are under continual pressure to change. This inherent instability derives from the fact that age-sex roles vary with movement in the family life cycle. As both children and their parent age, role expectations are modified.

The presence of a severely handicapped child in the family can be regarded as a factor in the arrest of the family cycle (Farber, 1959). This assumption is made on the following basis:

1. In interaction with their children, parents tend to assign a status to each child commensurate with the capabilities they impute to him.

- (a) The roles embodied in the status are classified on the basis of age grading. By definition, normally, mental age is approximately equal to chronological age.

- (b) Age grading in a culture is regarded more as a psychological and social activity than as a chronological variable, e.g., the chronologically middle aged severely retarded individual is generally regarded as a "boy" or "girl" by those with whom he interacts. According to Eaton and Weil (1955) the Hutterite religious group excludes the mentally retarded from adult responsibility by cancelling baptism requirements, thereby giving them the moral status of children.

2. As the child proceeds in his life career, the parents normally tend to revise their self-concepts and roles. With respect to their normal children, ideally, parents continually redefine their roles, obligations, and values to adjust to the changing role of the child. With respect to their retarded children, the parental role is fairly constant. Regardless of his birth order in the family, the severely handicapped child eventually becomes the youngest child socially. A very severely handicapped child at home would not engage in dating and courtship, belong to organizations, seek part-time employment, or take part in other activities characteristic of adolescents. In his progressive movement to the youngest-child status, the severely retarded child would not merely slow down movement in the family cycle but also prevent the development of the later stages in the cycle. Birenbaum (1970) ascribes an increasing severity of family problems as the retarded child reaches adolescence.

The relative ages of a retarded child and his siblings seem to affect the extent to which there will be a revision in their birth order socially. Shere (1955) investigated 30 pairs of twins. Within each pair, one child was cerebral palsied. The behaviour of the parents toward the twins differed in certain respects: 1) the parents generally expected the non-cerebral palsied child to assume more responsibilities and to act older than his age or capabilities would warrant, 2) the parents tended to be more responsive to the problems of the cerebral

palsied child and oblivious to those of his twin, 3) the parents overprotected the cerebral palsied twin, permitting him little discretion in his activities. The non-cerebral palsied twin was more curious and adventurous, less patient, more excitable, less cheerful, more resistant to authority, and more prone to emotional outbursts than the cerebral-palsied twin.

The Farber (1960a) study of 240 Chicago area families with severely retarded children investigated characteristics of those normal siblings who were closest in age to the retarded child. Farber found that the retarded child's siblings were affected by his high degree of dependency, which adversely affected the siblings' relationships with their mother. When the children were young, interaction between the normal and the retarded brothers and sisters tended to be on an egalitarian basis. As they grew older, the normal siblings frequently assumed a superordinate position in the relationship. However, siblings who did not interact frequently with their retarded brother or sister generally were affected less than those who interacted frequently.

Factors related to the family life cycle provide an impetus for revising adaptations. What may be merely an impropriety at one phase of the family life cycle becomes offensive in another. The minimal amount of adaptation at one stage of the family life cycle is insufficient to handle offensive behaviour that may emerge at a later stage.

Labelling Phase: Improprieties and Offensive Behaviour

When a child fails to develop according to a normal development time table, ordinarily we try to fit a number of labels to explain this failure, usually choosing the less offensive labels first and dreading the most stigmatizing ones (Davis, 1961, 1963). The father who regards his young son with Down's syndrome as having a slight speech impediment, correctable through speech therapy, does not yet require significant strategies of adaptation. As yet, this behaviour is

an impropriety, but not offensive. To the outsider who had to point out the behaviour, however, this failure must have somehow been offensive.

What makes behaviour offensive? Evidently, the consequences of the behaviour are important. For example, suppose a child does not walk when he normally might be expected to or does not start using language at the appropriate developmental time. The parents might not consider this proper, nor would it, however, be offensive. They could merely regard the child as a late walker or a late talker. They might regard the same behaviour as extremely offensive, though, if they believed it to be symptomatic of mental retardation. Having a personal diagnosis validated by a physician or psychologist would reinforce the parents' view of the behaviour as offensive.

The redefinition of a retarded child's behaviour from merely "improper" to "grossly offensive" undoubtedly produces a shock to the parents. Parents almost without exception report this realization as constituting a major tragedy in their life. Sometimes, the parents may take this occasion to turn against their spouse, regarding him (or her) in turn as offensive for having some sort of role in this event. Occasionally, it is the physician who is regarded as offensive. To regard another as offensive is not to discredit him (or her) personally as one might do in denying the validity of a diagnosis, but instead one blames the other for offending him. Unlike stigmatization, which in effect implies that the "spoiled" individual does not have a right to continue interaction, offensiveness constitutes a transgression, which does not damage an individual's right to interaction, but does make continued interaction disagreeable. Having reached the point of defining the child's failure to develop normally as offensive to them, the parents must now decide how to handle this offensiveness.

Normalization Phase

Having defined the child's inappropriate behaviour as offensive, the parents must either eliminate this offensiveness or learn to live with it. Parents, when asked to participate in a study of families with severely retarded children, have responded, "But we don't have any special problems; we are a normal family, everything about us is normal. The fact that one of our children has a special problem makes us no different. In most families some children have problems of one kind or another." The minimal family adaptation, following the communication of the deviance label, is to try to handle the offending child within the existing arrangements of family roles and norms (see, for example, Galiker et al., 1962). The maintenance of deviance within the normal scheme of things, despite the family consensus that something is amiss, can occur in several ways: 1) some family members may suppress their perceptions about the existence of a problem, 2) some family members may convince others to change their perceptions (i.e., their labels), or 3) as in "pseudo mutuality," the family members may all pretend that all is well (Wynne, 1969). Although pseudo mutuality has been discussed mainly in connection with mental illness, the fiction of normality in family relationships occurs in numerous offensive situations; deviance disavowal in interaction with physically disabled persons (Davis, 1961), the pretense of uncertainty of prognosis in polio and leukemia (Davis, 1963; Murstein, 1960), shopping around for a favourable diagnosis for severely mentally retarded children, the family's denial of a parent's compulsion to drink or to take drugs (Jackson, 1956), or the denial of bizarre behaviour of a psychotic parent (Clausen et al., 1955). As long as the deviant person and his family can carry off the fiction of normality, there is no need for further adaptations in family roles or norms. It is only when the fiction of normality cannot be sustained (or itself interferes with the attainment of family goals) that more complex adaptations must be sought.

In his discussion of courtesy stigma (i.e., someone who has a spoiled identity because he is affiliated with a stigmatized person (Goffman, 1963), Birenbaum (1970, p. 198) writes that "to the extent that mothers of retardates are able to perform roles similar to those performed by mothers of normal children, the consequences of the courtesy stigma they bear are manageable." These are manageable when 1) under conditions of role nonconformity, others are "considerate" in accepting "the plight of the family with a disabled child," or 2) situations can be avoided in which the risk of exposing the nonconformity is high. As long as others with whom one interacts "forgive" failures in role performance, there is no need to renegotiate the basis for continuing the relationship. The failures are seen as improper but not offensive.

When do people stop forgiving failures in role performance? Presumably, when 1) these failures are no longer seen as unavoidable lapses, 2) the failure itself (regardless of basis) produces bitter disappointment and interferes with important goals and is viewed as a permanent state, 3) the demands on one's resources exceed his or her ability to fill in for these failures, and/or 4) the costs of carrying a courtesy stigma outweigh the gains from maintaining the relationship. There is then a time when an existing role arrangement may flounder, and, finding the situation offensive, the person calls for renegotiation of the allocation of family roles, either directly or through an intermediary (such as a professional or a relative).

Mobilization Phase

When the family cannot resolve the offensiveness within existing arrangements, it must make minor adaptations to fill lacunae or exert greater efforts in existing roles. This extension of responsibilities requires a change in expectations of all the family members in a systematic reapportionment of duties. The family members then retain many of their previous

privileges and obligations, but are faced with a change (probably minor) in the authority structure and division of labour. Thus, the wife may encroach upon the husband's household domain, or the husband on the wife's, or perhaps the child on the mother's. Yet, the original person retains primary responsibility for that domain.

In "normal" family life, participation in organizations with friends outside the family ordinarily supports the norms and values associated with everyday life. For the family in crisis, these ordinary community relationships do not support norms and values pertinent to handling "the problem." On the other hand, other extrafamily coalitions do assist family members in handling the crisis. Women with husbands in the military service shift reliance to grandparents and relatives; the wife of the mental patient withdraws from family and friends and forms coalitions with the mental hospital staff; parenthood ordinarily involves a curtailment of social activities with friends who have no children); attempts are made to decrease the social visibility of drinking and eventually coalitions are formed with doctors, social workers, psychologists, and the like, and with nondrinking alcoholics; the family of the unemployed tends to withdraw from friends at the old social level and to find new friends at the lower socioeconomic level.

There is widespread evidence that parents of severely retarded children tend to isolate themselves socially (Schonell et al., 1959; Kramm, 1963; Tizard and Grad, 1961; Birenbaum, 1968). Birenbaum (1970) suggests that while reciprocal visiting may decrease significantly, parents "found it more comfortable to receive guests in their home than to visit other people's houses"; there was apparently less awkwardness and embarrassment. This isolation does not seem to extend so much to relatives. Either relationships with kinsmen do not change or they may even be intensified as the relatives show "consideration" for lapses in role performance.

Yet, defence against outside intrusion does not by itself imply conformity to normal parental roles in families with retarded children. McAllister, Butler, and Lei (1973) report a lesser amount of reading stories to children or talking with children in families with retarded than with all normal children. The parents may thereby cut down on socializing behaviour at the same time they also diminish their visits with relatives, neighbours, friends, and co-workers. The avoidance of failure-validating situations seems to mark the early adaptations made.

The principle of minimal adaptation suggests an uneven kind of transformation of the family in handling the offensive behaviour. The less important conveniences and more threatening actions are given up in role trade-offs, and the more significant aspects of existence are clung to. In an earlier study (Farber, 1960a), it was feasible to identify families as home oriented, parent oriented, or child oriented in decision making and to classify families as relying upon residual strategies. These residual category families had apparently not been able to retain or to agree on these more significant elements in their family life, and the parents were evidencing some difficulty in their marital relationship. Bermann's (1973) more recent analysis of family interaction patterns also indicates strongly that, in the process of eventual polarization, the preferences of the individual members become highlighted above common concerns.

There is a danger in the mobilization phase that resentments may arise over extensions of roles which have been negotiated or enforced. Family members may believe that 1) the social debt owed them may never be paid off or 2) the social interest accruing in this debt is not sufficient to compensate them for their sacrifice. Yet, the mere resentment of a possibly unfair division of labour is not enough to force a change. Children may resent additional attention that parents give the retarded child without the parents even

becoming aware of this resentment. For example, in one family the brothers and sisters of a retarded boy felt sorry for their parents, and although they felt "hurt" by their own relative neglect, they kept this resentment from the parents even after achieving adulthood. This hidden sense of oppression may, however, not be restricted to children. Husbands as well may resent additional household duties which might interfere with social mobility or leisure activities. As long as this resentment is seen merely as a necessary imposition, it can be maintained and justified. However, when the impropriety seems unjust, the family members feel offended, and they seek further role renegotiation.

Revisionist Phase

At some point, family members begin to regard themselves as having "special problems." The minor revision in family roles may not handle the offensiveness in family relationships effectively. In fact, there may be a diffusion of offensive behaviour throughout the family. When everyone is offended by what is required (in contrast to the large investment of time, energy, and/or personal trauma), there is a general demand for changing the basic role structure of the family. The continuation of family life in a crisis situation may be sustained eventually through a rearrangement of age, sex, and generation roles in the family. The duty and power structure of the family is rearranged. In the case of the chronic alcoholic, the drinking husband is demoted in generation to the role of a recalcitrant child, and the mother assumes her husband's responsibilities, while sharing some of her own with the children. Similarly, the unreliable behaviour of the mentally ill husband causes a comparable demotion. The unemployed husband withdraws from planning and management; children assume adultlike roles, contribute financially, and demand a change in power structure in the family. In these instances, the family members have departed from conventional age, sex, and generation roles. The family organization itself becomes deviant.

One of the organizational problems that occurs with extensive revision of family roles is how to maintain a coherent set of social relationships in the face of high tension. Since there is a general conception that retarded children do generate family problems, the parents can feel free to blame the state of the family upon the presence of the retarded child. The child is in a powerless position. He cannot effectively counteract the parents' efforts to regard him as a scapegoat, and he obviously represents a symbol of failure to them (Vogel and Bell, 1960). Moreover, the retarded child can carry out the role of a problem child without any special effort: he has seriously violated social norms, but he is rewarded for his offensiveness by being exempt from any responsibilities and obligations. Thus, the child has earned his role by drawing off aggression and thereby permitting the family to maintain its solidarity.

In the extensive revision of family roles, the mother, faced with a daily life she finds impossible to endure, may become sick. This situation tends to occur more often in lower socioeconomic level families (Farber, 1960b). However, like any other role, a "sick role" in the family must be negotiated with other family members. The absence of a parent, for example, would eliminate the possibility of negotiating such a role. The obvious need for personnel and resources in order to negotiate a sick role is indicated by Koss' (1954, p. 30) quotation; "I wish I really knew what you mean about being sick. Sometimes I felt so bad I could curl up and die, but had to go on because the kids had to be taken care of, and besides we didn't have the money to spend for the doctor—How could I be sick?" Consistent with this speculation concerning the inability of some families to renegotiate sick roles in crisis, Roghmann, Hecht, and Haggerty (1973, p. 58) find that persons in incomplete families tend to report more chronic conditions and more difficulty in coping with illness and other family problems than is the case of people in complete families.

The extensive revision of role bargains in the family may be negotiated at a high cost in extrafamilial relationships. Farber (1959) and others have noted how daughters (when the retarded child lives at home) are called upon to provide much household and childcare assistance. They have also noted the tension which exists between the retarded child's mother and sister in this situation. This tension extends beyond the household. Gath (1973) has found that sisters of mongoloid children show a high amount of antisocial behaviour in school. At the same time, however, Farber and Jenne (1963) have also found that the siblings who interact a good deal with their retarded brothers and sisters tend to be more serious in outlook on life and less concerned with acceptance by peers. This alienation seems to pervade interaction with outsiders.

Polarization Phase: Identities in Danger

At a minimum, family members would regard extensive revision of family roles to meet the exigencies of the situation at departing from the ordinary norms of propriety. One would expect such families to manage carefully information about themselves to the outside world (Goffman, 1963). As family members encounter situations within the home (as well as outside) which they see becoming offensive to themselves and to each other, their careful information management extends into the household itself.

Eventually, family members may participate in pseudo-negotiation with each other whereby superficially "offers" of services are accepted, but actually the contracted roles are never played out. Nor is there overt redress over failure to comply with contracted roles. In describing interaction process analysis in a troubled family, Bermann (1973) writes that as the crisis continues, the family members "pointedly behave in ways that seem calculated to abort extensive interaction, that appear designed to attenuate continuing exchange between family members." Whereas in the earlier phases of the crisis

family members had been placed in a position where they were encouraged to sustain interaction, in later stages:

There is a polarization of behaviours in crisis-initiations [of interaction] are either inconsequentially noncontroversial or [are] threatening antagonism; reactions are either those of ready acquiescence or of withdrawal. . . . Person A can act on Person B, so as to have no impact on him, or so as to terrorize him. One or the other. Nothing between Person B, for his part, is merely intent on getting out of A's way. He, as much as A, wants to be left alone. To this end he acquiesces or withdraws. The facade of social exchange is maintained. . . . In the end people do not want to be disturbed. It is not that they don't care. It is because they care more than they can admit (Bermann, 1973, p. 86).

Although family members may remain under the same roof, they establish a tacit agreement to interact as briefly as possible in order to permit them to coexist with as little sense of abuse as possible. In this manner, some shred of belongingness as a family can be maintained.

Wynne et al. (1958, p. 638) emphasize the large role that secrecy and privacy play in families which are pseudo-mutual in their interaction. "Each family member may be expected to conceal large areas of his experience and not open to communication with the others." The norm for the family is based on a perhaps "exaggerated" right of privacy, with the amount of sharing intimate, personal things the prerogative of each family member. In an effort to maintain a visage of cohesion, there may be sweeping approval of any kind of behaviour, with departures from acceptable standards explained away by some rationalization. In this manner, all semblance of the family as an interacting group which socializes its members and guides their conduct is lost. One finds that in families with a severely retarded child, normal brothers may be given free reign as long as they do not get

in the way at home. Similarly, in those families in which the parents' marriage shows signs of low integration, there is a tendency (where there is a retarded child in the home) for the parents to seek escape outside the home.

In the end, however, the accumulation of problems generated by the failure of successive adaptations may be so great that the entire complex of family relationships loses its viability. Both parents may, for various reasons, have become incapable of filling family roles, and the children may have to be parceled out. Fortunately, few families reach this stage. One extreme case might be mentioned in which the father had been idle because of a bad heart for at least a decade, the mother was in the home with cancer at its terminal stages, the adolescent daughter was having incestuous relations with her severely retarded brother and doing poorly in school, while the normal brother understandably was failing all of his subjects. (These pieces of information were garnered from various sources). Yet, the father earnestly believed that his wife's "wasting away" would miraculously stop, a spine adjustment by a chiropractor would halt further deterioration of his retarded son, his daughter would be a nurse, and his normal son a doctor. With the children away from the house most of the time and the mother too weak and too much in pain to be active, there was little family interaction. What interaction there was tended to be highly guarded. No one was interested in ridding the father of his delusions, least of all the mother.

Elimination Phase: The Formation of New Identities

Ordinarily, when we think about eliminating the offending person in families with severely mentally retarded children, we have in mind institutionalization of the retardate. Indeed, in most families when the offense of the retarded child is sufficiently grave (e.g., interfering with the parents' and/or siblings' mental health or social mobility), institutionalization

seems an appropriate solution (Culver, 1967; Downey, 1965; Farber, Jenne, and Toigo, 1960).

Yet, in some families the progression of adaptations may have generated so much offensive behaviour in the family, that "transgressions" of a spouse or normal child may be considered as more serious than the retarded child's. As a consequence, the parents may divorce or a sibling sent to live with a relative. Thus, for example, one parent who had completely identified herself with the "cause" of the mentally retarded gave up her marriage to a man who resented her almost total involvement with her parent group, her disdain of those who were not sympathetic to her cause, and her delusion that her group's continued existence depended solely upon her leadership. Or, in another family, even after the retarded child had been institutionalized, the parents threw themselves into volunteer work related to the mentally retarded and later were considering hospitalizing their child of normal intelligence for a "nervous breakdown."

One might review conceptions of institutionalization to determine families with retarded children handle the elimination phase. Some parents, particularly those of middle class background, prefer to regard the institutionalized child as dead or depersoned. Their contact with him or her is minimal. Those of lower socioeconomic background, however, more often regard institutionalization as living-away-from-home, and their contact and readiness to reincorporate the child may be strong (Downey, 1963; Mercer, 1965). Perhaps lower class families are less inclined to avoid crises, regarding them as part of family life.

The Context of Adaptation

The progression of successive minimal adaptations described in the previous paragraphs requires the qualification that all other things are equal. Empirically, however, numerous factors impinge upon family interaction and affect the course

of events, and given different conditions, the succession of adaptations may be modified. Families may skip some phases of the process, or complex adaptations may precede simpler ones. It thus seems advisable to suggest conditions under which modifications of the adaptation process occur. Some of these conditions are sketched briefly below.

Prior Role of the Offending Deviant

If the offensive person has been regarded by the other family members as essential to fulfilling dreams and goals, then the family would be more reluctant to make changes which might reduce the status and participation of this person. For example, in an earlier study, I found it useful to distinguish among families with a strong parent orientation, child orientation, general home orientation, and mixed or vague orientations (Farber, 1960a). These families differed by age of parents, social-mobility orientation, handling of their retarded and normal children, and in adaptations to family problems. Especially among parent-oriented, upwardly mobile families, there was a tendency to institutionalize the retarded child as soon as possible (Culver, 1967; Farber, 1960a). Many of them skipped any attempt to live with the retarded child and immediately eliminated him from their lives (Downey, 1965). Not so with the child-oriented families wherein jobs, social life, and home life were all organized around the children. In any case, an offending member, whose presence otherwise promotes familial goals about which there is consensus, would be more likely to generate successive minimal adaptations than one whose presence contributes less to the overall family goals.

Prior Family Loyalty

In some families, for a variety of reasons, marital or filial ties may have been fragile even prior to the retardate's presence. Here again we would not anticipate a continual development of a series of successive minimal adaptations

which goes on until a satisfactory arrangement has been attained. Instead, members whose family bonds are fragile might extend their activities outside the family or might dissolve family relationships altogether. For example, among families with severely retarded children, parents whose own ties to their family orientation outweighed their loyalties to spouse and children sometimes escaped into many activities outside the home. These marriages seemed tenuous to begin with and could not readily withstand the problems generated by the presence of the retarded child. Hence, in contrast to these examples, the development of a process of successive minimal adaptations seems to require that the family bonds be fairly strong to begin with.

Reliance on Experiential Guides

The family may not build up a succession of minimal adaptations itself but may rely instead upon previous experiences of others (or its own prior adaptations to crisis). Influences here may include 1) professional therapy or advice, 2) the experiences of relatives or friends facing similar crises, 3) the family's previous experiences with problem situations, 4) mental experiments which anticipate probable consequences of different adaptations, or 5) cultural prescriptions. In any of these situations, the family members may discard lesser adaptations as unworkable and go on to ostensibly more complicated, more drastic ones. However, knowledge that these adaptations do work precludes the necessity of having to renegotiate roles from scratch.

Changes in Family Composition

The development of a series of successive adaptations requires that the composition of the family remain unchanged from that in existence prior to the crisis. Otherwise (as in death, imprisonment, or involuntary military separations) where families lose members or (as in homecomings from prison or military service) where they gain members, families do not

have options regarding simple minimal adaptations, the required changes in role tend to be drastic. Yet, we do not know how extensive the adaptations must be. Thus, even where simpler adaptations are impossible, it may be instructive to view the progressive development of more complex, more drastic ways of meeting critical situations.

Community Relationships of Family and Offending Members

The description of successive family adaptations to a critical event starts with labelling by family members. Adams (1971, pp. 32-322), however, indicates that the critical event may be of such a nature that the family problem is labelled first in the community and only afterwards within the family, and he suggests that revisions of family relationships with outsiders may occur even while the family denies the existence of a problem (e.g., avoidance or ostracism). While Adams is accurate in his remarks, his criticism does not preclude another later revision in community relationships in the order of adaptations described in the previous section. His comments provoke a question with regard to the initiation of labelling: does it make a difference in the progression of phases of adaptation if the initial labelling is done outside the home (e.g., a school problem or a neighbourhood nuisance)?

Discussion

Although there have been numerous investigations of families in crisis, little progress has been made regarding the understanding of the adaptations of families to these critical events. The major findings have been tautological: flexible families more readily make changes in meeting problems. Few studies have suggested any mechanisms as to how these changes are accomplished. Bakke's (1940) investigation of unemployment during the 1930's Depression, Jackson's (1956) study of the father's alcoholism, or Farber's (1964, pp. 406-438) analysis of families with a severely mentally retarded child all do describe some sort of progression of stages. Yet, they omit

mention of a basis for this progression. Without positing a mechanism for justifying the stages they have described, they have been unable to counter criticisms regarding the sufficiency or necessity of the stages they describe in explaining family reactions to crisis. (See, for example, Adams, 1971, pp. 321-322).

This paper has presented a set of assumptions which appear to justify the formulation of a progression of phases in the adaptation of families to crisis. Briefly, the argument is that, *ceteris paribus*, families try to make as few changes as possible in roles, norms, and values to the problems they perceive. Only as the simplest adaptations fail to produce an acceptable accommodation to the offending problem do they go on to a more complex solution. As a more complex solution fails, they go on to a still more complex solution, and so on. This principle of minimal adaptation to crisis seems to account for a predictable progression of phases of adaptation. This theoretical progression is present in Figure 5.1.

The qualification about other-things being equal may facilitate the formulation of a theoretical statement, but it also evokes questions regarding the kind of conditions which can affect the progression of phases of family adaptation. The chapter has listed several of these conditions: 1) roles of the problem members of the family prior to the deviance (or potential roles imputed to them), 2) priorities of family orientations and loyalties of the so-called non-deviant members who are called upon to develop adaptations to the problem, 3) the changes in family composition which provoke the crisis, 4) the presence of experiential guides, and 5) the possible emergence of the family problem first as a community problem. These conditions (and probably others) may influence families to depart from the principle of successive minimal adaptations and to skip or change the sequence of phases in the adaptational process.

Three other matters should be dealt with in relation to questions about conditions which may affect in the adaptational process. These include 1) voluntarism as a factor, 2) the duration of adaptations, and 3) the content of adaptations. These constitute additional problems for empirical investigation.

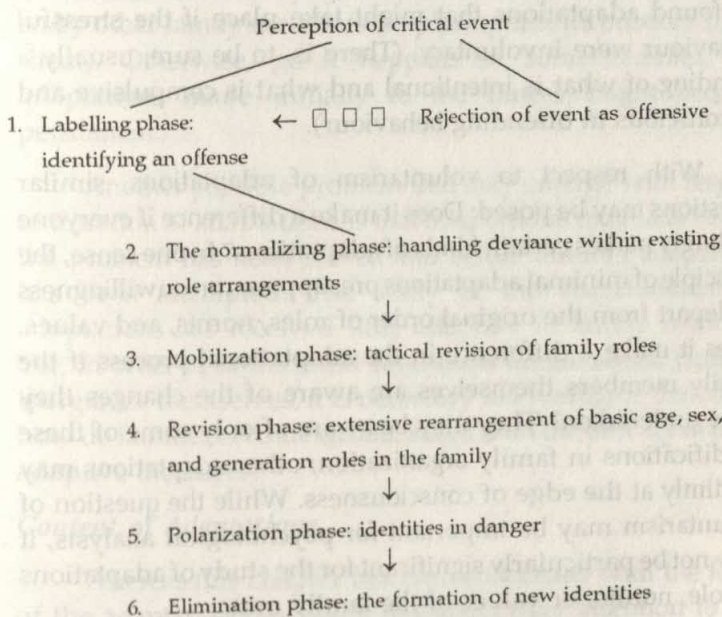


Fig 5.1. Phases in the theoretical progression of successive minimal adaptations of families in crisis. Note: Each phase in the progression is capable of being (1) a transitional state to the next phase if the adaptation is not satisfactory (or at least an acceptable) accommodation for the family or (2) an end state, which arrests the progression, if the adaptation is acceptable.

Voluntarism in Crisis and Adaptations

Adams (1971) suggests that crises wrought by voluntary actions (e.g., divorce or illegitimacy) are different in effects on family relationships than those brought about by involuntary action (e.g., unemployment or death). He points out that they differ, for instance, in the extent of guilt attached to the critical

event. But what sets in motion a series of adaptations generally is not the intended action, but the unintended elements. Voluntarism may become an aspect of a critical event only when family members intentionally create disruption (e.g. cruel treatment of others). Still familial adaptations to this offense may follow the same sequence of progressively profound adaptations that might take place if the stressful behaviour were involuntary. (There is, to be sure, usually a blending of what is intentional and what is compulsive and unconscious in offending behaviour).

With respect to voluntarism of adaptations, similar questions may be posed: Does it make a difference if everyone willingly makes certain kinds of adaptations? In one sense, the principle of minimal adaptations presupposes an unwillingness to depart from the original order of roles, norms, and values. Does it make a difference in the adaptational process if the family members themselves are aware of the changes they have undertaken? They may be aware of only some of these modifications in family organization; other adaptations may be dimly at the edge of consciousness. While the question of voluntarism may be important for psychological analysis, it may not be particularly significant for the study of adaptations in role, norms, or values of the family unit.

Duration of Adaptations

A second dimension not handled in this chapter is that of the durations in relation to that of the problem situation. Presumably, as the need for the adaptation disappears, the shift in roles, or values tends to dissolve. Still, in some instances the offensive situation which generated the crisis may disappear (e.g., illness or unemployment), but the adaptive measures may endure. It may be useful to regard the elimination of the critical event as still another problem situation (e.g., the returned military veteran (Hill, 1949). One would then anticipate, other things being equal, that the

family would handle the reversion to its "normal" situation with the same kind of progression of successive adaptations as those provoked by the initial crisis. This perspective suggests, for example, that the sick role (Parsons, 1951), which verges on a revision of age-sex-generation roles, be considered as undesirable not only by the patient, but perhaps even more so by other family members (as placing undue burdens upon them). Otherwise, as it happens in some families, the adaptations made initially to the illness might become permanent.

Another possible problem that may emerge with respect to duration of adaptations is that adaptations may fade before the problem has been solved and before another adaptation has been attempted. The study of the abandonment of adaptations has received little attention in family research. Yet, in order to understand conditions under which families reorganize themselves, it is necessary to investigate this topic: how do families become disillusioned with the efficacy of their adaptive measures?

Content of Adaptations

Whereas this chapter has been concerned with the form of the adaptation process, it has given little attention to the content of these adaptations. Yet, the application of the theoretical scheme outlined in the chapter depends for its efficacy upon the appropriateness of adaptations for arresting the process and in that sense solving the family problem. I mentioned earlier 1) the part played by family values in determining the appropriateness of the particular adaptation and 2) the use of "games of strategy" as a research model for determining the "rationality" of any given adaptation. It is thus necessary to examine empirically the kinds of conditions under which these adaptations "work" in creating an acceptable solution or accommodation to the family problem. In doing so, it may be advisable to establish the costs and utilities of

specific adaptations in order to determine a continuum of complexity or profoundness of changes in role organizations, norms, and values in different phases of the process. This procedure would permit an empirical test of the theoretical scheme and might provide guidelines for therapy.

While the empirical test of the principle of minimal adaptations (and the progression of successive changes derived from it) would undoubtedly reveal shortcomings of the scheme, it should also suggest directions for revision of sociological analysis of family crisis (for example, the development of crisis figures, in which stresses are multiplied). Such an analysis might suggest, for example, how adaptations to an offensive situation may be eufunctional up to a certain point in terms of continuity of general values or mental health, yet as the family continues to introduce further adaptations in an effort to handle the offense, these later efforts are destructive of the basic conditions for the family's integrity.

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6

SOME RESEARCH PERSPECTIVES IN SPECIAL EDUCATION

The social institution of foster family care is founded on a paradox, which may help to explain why this service to dependent children is a highly promoted tool of child welfare even while it is recognized to contain many potential problems that require constant surveillance and reassessment. This paradox stems from the *nature of the service demanded*, the care of children deprived of parental protection and nurture; the *social purpose it serves*, safeguarding the survival of the next generation; and the *resources required* to meet these ends, stable family households in which the adult members are motivated by the fundamental, even primitive, emotions necessary to the nurturing parent role. Beyond these rudimentary basics modern foster care must also encompass a clear understanding of the social and psychological dynamics that provide its motivation and rationale. A formal foster care service is of itself evidence that the cohesive, emotionally based social network which formerly could absorb the vulnerable members of society has broken down, transforming an earlier implicit social process of reciprocal obligations within the extended kinship group or close-knit, face-to-face society into a complex and explicit organization.

The more impersonal professional system depends on

strangers for caretaking tasks, monetary recompense rather than reciprocal service, and checks and balances to ensure that it works efficiently and to the child's maximum advantage. Foster care practice, as we know it today, is the end-product of this evolutionary metamorphosis, and its different ingredients reveal an attempt to balance intimate gut-motivated nurturing with more self-conscious professional insights and techniques about how to provide this in its optimal form.

Research undertaken in this field over the past 15 to 20 years illustrates the need to reconcile these two complementary but often conflicting aspects and the theoretical application of foster care to the specifically handicapped population which is our concern today, namely the intellectually disadvantaged child, presents a particularly telling paradigm for this paradox. The word "theoretical" is used advisedly because despite valiant sporadic efforts to provide this alternative to institutionalization for children identified as retarded (Burgess and Morrissey, 1964, 1966; Morrissey, 1966), foster family care for this group has not been developed as a consistently available service under the general child welfare rubric.

Very little research is reported on this subject and I suspect not much more being carried out. In consequence, exhaustive and rigorous taking has failed to assemble much straw for the bricks of this chapter. So, I am offering a summary of the significant areas of research that have been burgeoning in the foster care field in the past two decades, prefacing it with a thumbnail history of foster family care in America and England. From these beginnings I hope to extract the generic elements of foster care that have clear relevance for our specialized field and will point the directions in which a research thrust of the future could be made. I shall garnish this basic diet with brief accounts of the rare research ventures and findings that have been undertaken in regard to handicapped children, in which are included those with our specialized disability.

I shall start by outlining the reasons why, in my opinion, foster care is today an important social issue for mental retardation. In analyzing this subject we need, as always, to bear in mind the complex and varied character of the constituency under discussion, and to realize that its social implications are likely to be different for children with different types and grade of handicap. Mild retardation, with its inseparable social concomitants, presents another set of problems from those associated with the more conspicuous socio-clinical condition due to severe neurological damage.

However it is equally important not to lose sight of the fact that these two disparate groups have problems in common when it comes to needing substitute parental care. I shall therefore begin by looking at those components of foster care that apply across the board to all retarded children and then branch into those aspects that relate more specifically to the different categories.

Foster family care is important to all retarded children because it represents one segment of the coordinated spectrum of services that may be required to counter some of the social needs and hazards that arise from their social and intellectual handicap. Its particular social significance lies in the fact that it offers a type of substitute parental care that most closely resembles the normal situation of family living. The normalcy of this situation is more likely to maximize the social and emotional development of a retarded child than the more familiar alternative of large-scale institutional care (Birch and Belmont, 1961; Stedman and Eichorn, 1964).

At this point it may be useful to examine the concept of residential care for the mentally retarded, and particularly why it continues to be an integral feature of any comprehensive service provision. The reasons are complex and tend to be different for the two categories of the mildly retarded and their more severely handicapped peers. For the latter, residential

care must be potentially available because of the long-standing tradition that has allowed, even encouraged, parents to institutionalize (sometimes from birth) children with conspicuous developmental and intellectual deficit that carries a prognosis of permanent social and intellectual disability.

We may promote the philosophical concept that a handicapped child has a right to his own home and family and is likely to flourish better in that normal setting than elsewhere (Stedman and Eichorn, 1964) and even support this pious hope with an efficient and comprehensive battery of supportive services within the community. But until all families and professionals abandon the residual belief that it is acceptable to abrogate responsibility for a retarded child's upbringing and delegate his care to society's organized welfare system, we must include appropriate, nurturing, and stimulating surrogate care within our service continuum. There will always be some children with neurological impairment and severe behaviour deficits whose management is too taxing for a normal family. Likewise the impoverished psychological and material resources of some families prevent them from accommodating even minor deviance without detriment to their own viability. For these situations foster family care may be the happiest solution (Adams, 1970). The project of the Retarded Infants' Services in New York City was initiated to meet these sorts of need (Arnold, 1971).

For the mildly retarded, foster family care is an even more serious issue that implicates both rehabilitation and prevention, because a proportion of all children with defined mild retardation faces the prospect of having to be placed in substitute care, due to the precarious and often deleterious character of their own homes and the social disorganization which characterizes them. In Massachusetts 18% of all the children in foster care on November 18, 1971 were deemed to have some intellectual disability, and an analysis of home backgrounds showed that around one-third of this sample

came from families of low socioeconomic status. Their parents had not completed high school, were unemployed or in unskilled work, and maintained their families on income of less than \$3000 per annum (Gruber, 1973).

These findings speak to the now familiar fact (to this audience it is documented coals to several Newcastles) that the mildly retarded are heavily distributed in the lowest socioeconomic strata of society both in America and Great Britain (Stein and Susser, 1969). An impressive body of research into this epidemiological phenomenon has enabled us to identify some of the specific components of the environment of poverty and low socioeconomic status that appear to be closely associated with retardation. These are overcrowded homes, run down neighbourhoods densely populated by less competent households, low income, large family size, parents of low intelligence, education and occupational skill (Birch et al., 1970; Heber et al., 1972), plus various manifestations of social aberrance such as delinquency and child neglect (Stein and Susser, 1960).

Looking at some of the research findings in foster family care, we see that the same characteristics of poverty and social pathology prevail to an overweighted degree among the families of children placed and are often the predominant reason for placement. Child neglect was one of the characteristics identified by Stein and Susser (1960) in the dysmorphic families of the mildly retarded sample they studied, and this problem appears in one guise or another as one of the leading causes of placement in at least three foster care studies. Deviant parental behaviour (neglect, abuse, abandonment, and exploitation) accounted for 21% of the placement requests in the Child Welfare League Study of foster care placement in seven cities (Shyne, 1969); neglect, abuse and family dysfunctioning appeared as a placement reason in 25% of the cases in the Columbia University Child Welfare Research programme studies (Jenkins and Norman,

1972, 1969), and in 14.4% of the cases in the study of foster care done in Massachusetts (Gruber, 1973). Characteristics of the children's families in all three studies indicate that a considerable proportion of parents had incomes less than \$3000 per annum, did not graduate from high school, and were in unskilled work, unemployed, or supported by Welfare.

To sum up, foster family care is an invaluable resource for children who are markedly retarded with residual chronic impairment, for children with functional retardation due to improper upbringing and children who are at risk of becoming retarded because of their social circumstances, if appropriate intervention is not provided. Its practical possibilities are preventing placement in a large-scale institutional setting and assisting the resettlement of children into the community from such a setting, if they have been previously placed there. It can also provide an especially tailored therapeutic milieu which will include the special insights and expert knowledge of social and psychological factors required to meet the unusual needs created by retardation. At the same time it will offer a living situation with all the components of normalcy built into it, which will prevent the alienating and stigmatized prescription that results from segregated institutional placement (Goffman, 1961; Vail, 1966). Foster care is therefore an important social instrument of the normalizing principle which informs the conceptual thinking and practical policy behind care in the mental retardation field (Nirje, 1969; Wolfensberger, 1973).

If theoretically foster family care seems appropriate, even desirable, for our constituency of intellectually disadvantaged children, we need to look at why it has not been hitherto utilized. Are these reasons valid? If not, how can we reverse them? What social science insights can transform this rather impoverished wilderness into a flourishing kindergarten in that word's original sense? A brief backward look at history of both child welfare and services for the retarded is necessary

to this understanding. When neighbourliness no longer sufficed to take care of children who had no family of their own, the English Poor Law discharged this responsibility by apprenticing them to families for work. Foster care proper came into being when the charitable foundation of Christ's Hospital boarded out those under age for apprenticeship with nurses in the suburbs of London (George, 1970). America followed this model by indenturing (Encyclopedia of Social Work, 1965) and town governments boarded out homeless families for a fee (Modell and Hareven, 1973). Thus the initial blueprint for foster care was laid down in both countries.

Two centuries later the social upheavals of industrialization forced both countries to develop more complex and sophisticated social services, and philanthropically disposed individuals with a sense of the social dialectics of cause, effect, and long term outcome began to experiment with better services for destitute or at-risk children. In England a clergyman made an arrangement with the local Poor Law authority to finance the maintenance of children from workhouses in private foster homes which he undertook to find and supervise himself (George, 1970). In the identical year a reformed gentleman, Charles Loring Brace, had the same idea in New York City and founded the Children's Aid Society (Encyclopedia of Social Work, 1965). This venture included an extensive foster home placement system in rural New York, the purpose of which was to provide a better environment for children to grow up than was offered by their own overburdened and impoverished homes or the alternative of a city orphan asylum. The English cleric's goal was to offer training as well as a setting that would be beneficial to emotional and social development.

Almost at the same time, Howe was harassing the legislature of the Commonwealth of Massachusetts to provide funds for a special school for the "idiotic children" it had in its care, mainly in the Country Poor Houses, with the express

intention of giving them a milieu and training that was suited to their limited capacities but would also stimulate them appropriately so that they would "be more of a man and less of a beast" (Howe, 1851): the 19th century concept of humanization and normalization. This excellently intended effort started the system of specialized residential care, so that while the *normal* children under Country Care were salvaged by assimilation into the foster home model the retarded were marshalled into their specialized educational establishments.

The separation of these two paths started here and became more sharply pronounced as different bureaucratic structures took different services under their aegis. Thus when nearly a century later progressive minded institutions wanted to resettle their residents out into community situations, this service had to be developed as an offshoot of the institutional model as Family Care, financed by funds from the mental health rather than child welfare bureaucracy. In this way the expertise and experience of fostering retarded children remained the province of social workers located in the institutions (Bishop, 1959; Crutcher, 1940; Doll, 1940; Kuenzell, 1938; Vaux, 1935), and did not generally infiltrate into, and so modify, child welfare philosophy, policy, and practice. When the First White House Conference on Children (1909) emphasized foster family care as a vital resource of child welfare, it did not include retarded children in its plans for promoting this service. The Conference on Research in the Children's Field meeting in Chicago in 1956 similarly overlooked this group of deprived children.

The landmark conference, however, has relevance to our theme because it highlighted the paucity of research findings by which practitioners by which practitioners could evaluate foster care, modify shortcomings, and plan for more effective programmes in the future. In an important paper entitled "Unanswered Questions about Foster Care," Meisels and Loeb (1956) refer to the dearth of formal research about foster home care, observing that:

In spite of concern with the results of the programs and recognition of problems . . . the methods which are suggested or tried are based not so much on systematic exploration of the facts in the situation as on the acceptance of axioms, speculations and inferences, and . . . there is practically no formulation of hypotheses growing out of the newly found knowledge and there is no research to test them.

After this rather castigatory start the paper proceeds to outline areas for which research data would be valuable. These are 1) an objective and scientifically based assessment of what constitutes a home sufficiently inadequate or detrimental to warrant the child's removal, 2) criteria for assessing foster homes, particularly their capacity for meeting the psychosocial needs of the child who has been separated from his natural family setting, 3) social work strategies for dealing with parents, foster parents, and community and maintaining a carefully balanced stance between the rights of each constituent, 4) the economic basis for foster home care and its costs relative to other forms of substitute care, 5) devising of a model for ideal psychosocial development to be striven towards for the children in care.

Either by dialectical process or happy coincidence a series of significant research projects were initiated in the next few years, resulting in a veritable renaissance of publications. These were concerned with reassessing current practice and suggesting new directions for the future that would meet emerging needs and the innovative practices these demanded. Maas and Engler (1959) published "Children in Need of Parents," which combined some telling insights about community differences in child care with a cogent picture of the status of children in foster care. "Selecting foster parents. The ideal and the reality" (Wolins, 1963) dealt with the process involved in foster parent selection and the role ascribed to this task. This important aspect of foster care was pursued in

greater detail by Fanschel (1961a 1961b, 1966) who was able to identify personal and social attributes in foster parents that turned in favourably with certain characteristics of foster children.

In England Parker (1966) analyzed the variables that seemed crucially related to success or failure in placement (judged by whether it lasted for 5 years or more), with a view to offering a predictive instrument for child care workers. At the same time the Child Welfare League of America was involved in a nationwide study of the decision-making factors involved in the placement process of children into substitute care of any form (Shyne, 1969). Since 1966 Columbia University has been engaged in a comprehensive study of child placement basis on New York City. This project has focused on the implications of placement for the biological family, for the agency taking charge of the child, and for the child, with emphasis on his chances for being successfully assimilated into his natural home (Fanschel, 1971; Jenkins, 1969; Jenkins and Norman, 1972; Shapiro, 1972, 1973). More recently the Governor's Commission on Adoption and Foster Care in Massachusetts published a report on foster home care in the Commonwealth (Gruber, 1973). Its purpose was to identify the characteristics and problems of children currently in foster care in that state.

These research projects cited do not claim to be an exhaustive survey of work carried out in this field. Rather they have been selected because their scope and content have most visible relevance, direct or indirect, to our specialized topic of foster family care for the mentally retarded child. Since this particular area of child care has been so little explored we must look to services for normal children and extrapolate those features that fit our group and can serve as a model for both programme development and research. Many of the points made by the investigators just quoted relate closely to handicapped children and by implication refute the traditional conviction that foster family care is not appropriate for them.

Before looking at these relevant "normal" features it may be enlightening to glance briefly at the theoretical arguments and practical obstacles that have hampered the development of this service. The bureaucratic barriers of categorical funding and assigned responsibility have already been mentioned. Others may be hypothesized as follows:

1. The management of a child with intellectual handicap requires special skills and expert knowledge that are unlikely to be found in ordinary run-of-the-mill foster families.
2. The supposedly static nature of this disability makes the task of raising a retarded child unrewarding at the best and exceedingly frustrating at worst.
3. The behaviour problems and lack of social skills that may be manifested by retarded children, who cannot be managed in their own homes or have been institutionalized, would militate against their successful assimilation into the nuclear unit of the foster family and the broader network of the community and school system, which supports the family.
4. Given the limited supply of foster homes available and the inverse ratio of supply and demand it is not politic to waste them on children whose placement success is in doubt and whose long term future social adjustment and productivity do not warrant the utilization of this scarce resource. This argument is an offshoot of the thinking that locates the retarded in permanent institutional placement and does not actively envisage their either remaining in the community-at-large or being rehabilitated into it. Therefore the normalizing experience of foster home care is less necessary as a preparation for adult life than it is for children of normal social and intellectual potential whose future role is theoretically not in doubt.

5. Families of the more conspicuously handicapped children have many misconceptions about foster care, associate it with social pathology and a negative social image, and are often resistant to accepting this form of care, much preferring the traditional socially affirmed option of institutional placement.

Several of the research studies on generic (as opposed to specialized) foster care speak cogently to these various points and if we examine their findings and those from research in mental retardation, we get an idea of how erroneous these assumptions are. Let us take first the point that retarded children are unlikely to appeal to prospective foster parents because of the developmental limitations inherent in their condition of residual neurological deficit and the anticipated lack of progress and resultant frustration for the child-caring persons. To begin with, only the most profound degree of basic neurological deficit results in a *totally static* condition. Studies on behaviour have indicated that given appropriate care, which involves emotional nurturance, stimulation, and structure, children with considerable deficit can sometimes show dramatic improvement (Hollis, Gorton, and Chester, 1967; Mackay and Sidman, 1968).

Further, in his study of the foster care role Fanschel was able to identify clusters of characteristics and attitudes (styled "factors") in foster parents which suggested different capacities for raising children with different developmental and behavioural characteristics. One distinction was between foster parents who preferred infants to older children, and another between those who showed an aptitude for aggressive, acting-out children as against those who did better with children showing exceptional dependency needs. The latter category comprised children with physical or mental handicap or emotional problems manifested in bizarre and dependent behaviour, and colicky infants. These data suggest that if we could identify potential foster parents with these personality

characteristics they might respond enthusiastically to the challenge of a retarded child. Another point in Fanschel's study relevant to our theme is that mothers fostering infants tended to find role satisfaction in the close personal interaction with the children in their care. Fathers on the other hand were much less involved in the fostering situation with infants. With older children they perceived their role in terms of "desiring to serve a worthy cause" and to provide a masculine model for the foster child to round out the family paradigm.

The study of foster placement success carried out in England by Gray and Parr (1957) showed that the highest rate of failure was in children with identified mental disability, i.e., who were in the educable and trainable ranges of retardation, severely maladjusted, or mentally ill. This group of children was the smallest subcategory within the studied sample (11%). Of these, only 15% were boarded out in foster families, the other 85% being distributed in larger scale homes, nearly half of which were a specialized residential facility. These results are disappointing from our point of view because children with other types of handicap were successful in 62% of the cases. Building up a viable foster care service for the retarded depends very much on being able to recruit parents with the sort of attitude and motivations that will neutralize potential failure. Fanschel's work offers a useful tool for identifying this invaluable resource. To balance it, it would be useful to have a parallel study which identifies those behavioural problems associated with retardation that are least tolerable to foster parents. Kushlick's (1970) criteria for children requiring placement could serve as a baseline, reinforced by other studies of reasons for placement (State of Illinois Department of Public Health, 1965), and the family stress factors reported by Tizard and Grad (1961).

The point leads into a discussion of another barrier to foster care for the retarded, namely the uncertainty of success and the potential waste of valuable foster home resources on

a child who cannot utilize them, and may also undermine the good will of the foster parent constituency because of the failure they symbolize. If we can establish some reliable predictability criteria about the sort of child likely to succeed, given his specific characteristics and their fit with the dominant characteristics of foster parents, this argument will be greatly diminished. Parker's study (1966) offers other useful predictive pointers. One consistently crucial variable was the presence of other children in the foster family setting and their relationship in age to the foster child. Where there is a birth child of the foster parents of under 5 or within 5 years of the foster child there is a strong likelihood of the placement failing. This is significant for our population because of the discrepancy between chronological and mental or social age and the prolonged dependency on foster parents, and it needs to be carefully balanced within the Fanschel findings that some foster mothers do well with children who have greater dependency needs.

The other and more cogent rebuttal of the implication that scarce foster homes should not be squandered on retarded children has already been briefly suggested by my earlier observations on the relationship between mild retardation, adverse socioeconomic living conditions, and admission to foster care. With the well documented evidence we now have that mild retardation of non-organic origin is susceptible to being either reversed (Heber et al., 1972) or substantially mitigated (Kugel and Parsons, 1967) through exposure to more stimulating, nurturing, and stable living conditions, it is hard to accept that foster care placement would be a waste when it has such rehabilitative potential. Children from socially depriving backgrounds who have experienced the culminating trauma of being removed from their homes are in equal, if not greater, need of a restitutive environment to counteract the stultifying influences they have been subjected to. This may well be provided best in a foster home rather than

in a large scale institutional setting. By the very nature of its structure this type of facility has its own built-in deprivative features which only serve to compound the initial insult produced by a deleterious home and summary removal therefrom (Braginsky and Braginsky, 1974).

Although the actual environment of foster family care is less alienating and tends to a normalizing model, it does not necessarily meet the quite stringent rehabilitative needs of this category of mildly retarded children. A specific effort must, therefore, be made to reinforce these natural therapeutic influences by providing some professional expertise for the foster parents and special remedial services for the retarded child. In Massachusetts, Gruber (1973, 1974) found that around 40% of the children in foster care had some form of disability and that of this number nearly a quarter had not had their handicap evaluated. For those that were evaluated, recommended treatment had not been implemented in 26% of the cases. Seventeen per cent of these "untreated" children had intellectual deficits but other disabilities frequently associated with retardation received similar non-attention. For example, behaviour problems which many retarded children in care demonstrate were neither assessed nor treated in around one-third of the children manifesting this handicap. the role of foster parents in regard to this problem is illuminating. Seventy-five per cent indicated that they were not aware of the existence nor extent of the child's disability prior to placement, and 13.8% who were fostering children with *identified* handicap denied any problem.

This suggests that many children with borderline or mildly retarded intellectual function are being absorbed into the main stream of child welfare without having due attention paid to their specific deficits until these manifest themselves in deviant functioning. This often results in disruption of the placement with a strong likelihood of transfer to a specialized facility for the retarded and consequent abrogation of the

normalizing goals. In these situations, which I suspect are not uncommon, we have to develop a precise understanding of the range and nature of services an intellectually disabled child needs, devise reliable mechanisms for identifying children at such risk and build in a system for ensuring that these support services are a routine component of the overall therapeutic goal of the foster placement. This is an area that lends itself to research.

In contrast to this bleak picture, we do have both information and structured data about specialized care for the more seriously handicapped in foster homes. This care is mediated through the provision of a comprehensive back-up service to foster parents and their involvement in specialized training. The latter includes didactic knowledge about normal and deviant child development, the range of handicap and its behavioural manifestations liable to be encountered, and specific techniques for managing the latter. This support may also take the form of structuring specific programmes to be carried out in the foster homes with direct professional assistance or consultation. An unpublished report from the Metropolitan Children's Aid Society of Toronto (Green, 1973) describes both its training schedules and the progress made by the children since its inception. Several other projects are reported in the literature (Justice, Bradley, and O'Connor, 1971; Mamula, 1970, 1971; Tomkiewicz, Biny, and Zucman, 1971). This component of foster care is also being vigorously pursued in many innovative programmes being developed in the Macomb-Oakland Centre in Michigan (Rosen, 1974), the Residential Services Programme of the Developmental Disabilities Council of Ohio (McAvoy, 1974), at the Levinson Centre, Bangor, Maine (Valentine, 1974) and at Fernald (Peters, 1974).

Closely allied to this trend toward expertise are two other movements in the foster care field. One deals with the question of appropriate additional reimbursement for foster parenting. The other relates to the change in the foster parent role *vis-a-*

vis the child welfare agency and its staff, and the much more sharply delineated roles that this so-called lay segment of the child welfare armamentum is defining, projecting, and consolidating for itself (Anderson, 1971; Hunzeker, 1971; Rosendorf, 1972). Recognition of the skilled expertise that goes into fostering has permeated the literature for a good decade, resulting in a redefinition of both tasks and roles. This new perception of function raises some conflicts around the quasi-supervisor-client relationship that has prevailed in the foster care situation.

Reimbursement is part of this new movement which defines motivation in more sophisticated terms than the simple desire to mother, and recognizes skills in the task that should be paid for like any other form of labour, over and above the subsistence allowance paid for the child's upkeep (Garrett, 1968; Pratt, 1966). This crystallizes the paradox I mentioned in my opening paragraphs in that new skills involving fresh remunerative obligations from the responsible welfare institution are being grafted on, or rather seen to emerge from, the older pattern of what is considered simple substitute parenting, and the hitherto implicit amateur status is being transformed to one with at least some dimensions of professionalism.

The question of how to determine what is suitable reimbursement for this new professionally slanted occupation has been systematically studied by the Children's Aid Society of Vancouver, B.C. This agency has devised a scale for measuring the degree of additional or unusual care required by children with different handicapping conditions, and has worked out a system for additional reimbursement commensurate with extra demands for time and more highly developed skills involved in their care (Shah, 1971; Shah and Poulos, 1974). The repertoire of handicaps includes emotional, intellectual, and physical deficits and so has clear relevance to our topic.

These extra inevitable demands on foster parents time and energy are being recognized in other practical ways. The Community Evaluation Rehabilitation Centre of the Walter E. Fernald State School is developing a foster care programme for children with multiple handicaps from community families, in lieu of institutionalization. This project includes a relief worker in the planning to give the foster parents officially sanctioned and reliably predictable time off (Peters, 1974). The Home Training Programme (a form of foster home care for children already placed in the institution) of the Elizabeth Levinson Centre in Bangor, Maine provides respite care on a regular monthly basis as well as on demand for emergencies (Valentine, 1974). Arrangements of this kind not only give foster parents much needed relief but also underscore the fact that they are doing the equivalent of a normal paid job and are subject to employment conditions generally prevailing in our society.

The new uses to which foster care may be put makes it especially important to accentuate its professional aspects. In addition to serving the more familiar type of dependent, neglected, or abandoned child who has been removed from parental care, it may now cover the very different contingency of another sort of child whose specific disabilities create management problems that are beyond the capacity of his natural family, no matter how well intended or devoted they may be (Lobenstein, 1973). Because of the unusual and specialized nature of the fostering task involved in such situations it is essential to implicate the foster parents as equal colleagues with other agency staff in making plans for a child's placement (Reistroffer, 1972). It also means that the natural parents must be equally involved in arrangements, from their moment of inception until they are concluded, in order to forestall the psychological and social amputation of child from family, and to make subsequent re-assimilation, if feasible easier and part of a dynamic continuum. This new development will

inevitably trigger of conflicts about the respective roles of biological and foster parents which the latter will have to be prepared to deal with appropriately, and this task will be easier to handle in their own expectations are to be professional caretakers rather than surrogate parents George (1971) has tried to sharpen up this role distinction by designating foster parent as "foster care workers."

From another angle it is important that foster care for the more obviously retard child has a strong visible professional image, to allay the reluctance natural parents may have about delegating their child's care to individuals rather than to an impersonal institution. Placement in the latter has been traditionally seen as an acceptable measure within the medical treatment model but foster care is not vested with equivalent professional status. Instead it carries implications of failure in the parental role which have serious practical consequences, in that many parents seeking residential placement for their child are adamantly resistant to foster care even though it is clearly most suitable for his needs.

Associated with this is the understandable fear concerning the long term security of foster home placement. Families who decide to place a severely handicapped child on a permanent basis are often unable to envisage foster care as a long term arrangement equally reliable as an institution, but are inclined to see it as an informal arrangement liable to land the child back in their laps. The other side of the coin is that ordinary households who have an interest and aptitude for fostering a handicapped child may be hesitant to do so, in case the placement is not successful and there is no guaranteed way of their being relieved of the child, since specialized foster care is in short supply and institutional waiting lists extremely long.

Both of these points have relevance to another recurring theme in the foster care field, namely the length of stay within

a specific placement, duration of time in care, and the limbo-like character of foster care, which is the concern of several of the studies on foster care for normal children. Maas' followup study (1969) of his earlier work (Maas and Engler, 1959) indicated that over half the children were in foster care for over 6 years. This finding was supported by the Massachusetts survey (Gruber, 1973) where the average length of stay was over 5 years. Both reports showed that for a substantial number of children ongoing contact with their families of origin was extremely tenuous and their chances of being reassimilated during their growing up period very slight indeed. Maas (1969) found that this risk was higher for children of low intelligence from families of low socioeconomic status.

The philosophy on this aspect of care provides an interesting contrast to that of the studies done in England on foster home recruitment (Gray et al., 1957) and placement prediction (Parker, 1966), which both used a minimum stay of 5 years in one foster home as their criteria of success. Although professional opinion in the United States has not generally favoured long term foster care, we should start to reassess its potential value for our specialized population. The sustained long range rehabilitative programming needed by the more incapacitated child, and the abrogation of parental responsibility that often accompanies placement, suggest that it could be a very valuable resource. The same consideration often applies to the mildly retarded in care who can be predicted, from research evidence, to come from socially disorganized homes which, even with help, cannot be guaranteed to reassimilate them. The crucial factor in both instances is that placement is done on a planned rather than haphazard crisis-precipitated basis (Andrews, 1970; Madison and Shapiro, 1970). Efforts must also be made to keep the foster parents consistently motivated to manage this type of child, and a carefully structured programme of professional

guidance and support to help them in the difficult task is essential.

However, this policy may not be without its conflicting elements that will need to be considered and resolved. Fanschel (1961), for instance, noted that foster mothers who enjoyed taking care of children with higher dependency needs had difficulty separating from them when the placement terminated, and were also inclined to an overprotective reinforcement of their dependency. While this latter tendency can be detrimental to a handicapped child if overdone, it could be exploited to advantage provided it is explicitly geared to the exceptional needs of a disabled child; these must be specifically identified by professional rehabilitative criteria. Another interesting facet to this problem of length of stay and foster parent roles comes from England. Fletcher (1974) found that short term foster mothers were more easily able to assume the professional role because of the decreased motivation to be substitute parents that is inherent to their situation.

My final point has sociological rather than psychosocial significance. Studies done in America, England, and France (Gray and Parr, 1957; Gruber, 1973; Maas and Engler, 1959; Tomkiewicz, Biny, and Zucman, 1971) have generally revealed that the majority of foster parents come from the middle to lower socioeconomic strata of society, have modest standards of living and limited education. For many of them fostering is an intuitive task, the skills which have either accumulated as a residual by-product of raising their own children or by osmosis. If the residual pool of foster parents continues to be recruited mainly from sections of society manifesting these sociocultural characteristics we shall face the delicate task of trying to graft professional insights and specialized child-rearing skills and techniques onto this essentially untutored constituency, as well as redefining its role along much more consciously professional lines. Fanschel (1966) suggests that:

in a rapidly moving society such as our own there is an increasing tendency for middle class orientations to take hold, even among unskilled blue collar workers.

This trend may significantly reduce the numbers of old style foster parents, compelling the child welfare field to look to other better educated social categories for recruitment of homes. It is unlikely, however, that this new resource group can be mobilized in sufficient strength right away and in the interim our attention must be directed to developing specialized skills in the existing body of personnel (Dorgan, 1974).

This should not present great difficulties because it is in line with modern social welfare policy that favours utilizing the particular skills of community residents irrespective of their level of formal education. The past decade has seen an impressive reservoir of untapped human resources that are susceptible to training in a variety of educational, professional, and social parameters (Ayres, 1973; Birnbaum and Jones, 1967; Brager, 1965; Epstein and Shainline, 1974; Pearl and Riessman, 1965; Specht, Hawkins, and McGee, 1968). In our particular field there has been a number of innovative projects utilizing personnel of this kind. The Retarded Infants Service of New York initiated a pilot programme for training low income, unskilled personnel to work with retarded children and their families under the surveillance of professional staff in an outpatient clinic (Budner, Arnold, and Goodman, 1971). The more recent home stimulation programme reported elsewhere by Levenstein (1974) utilized workers from the same backgrounds as the families they were helping, and the Child Development Programme of Mississippi was organized and run entirely by local women working with professional consultation (Levin, 1967).

Along the same lines a report in Child Welfare (Garber, 1970) describes a programme for recruiting foster homes from low income families in the Spanish Harlem section of New

York City, emphasizing the precise and carefully planned system for recruitment and three successive stages of screening and training. Since a high proportion of dependent neglected children coming into care are from ethnic minority groups, the question of mobilizing homes that can provide a continuation of the child's native cultural milieu is crucial. In the studies done by Columbia University and the Commonwealth of Massachusetts the percentages of children of minority group origin were respectively: black c. 40 and 14.8; Spanish speaking 31 and 1.8. Approximately 20% of the children in the Child Welfare League study were from non-white families. Some mildly retarded children are likely to be included in these figures, as they are in every child welfare caseload.

Equally important, however, is to ensure that such homes are capable of understanding the special needs of an intellectually or emotionally disabled child and able to develop the skills necessary for his rehabilitation. Two different research projects speak to this point. Fanschel (1966) noted that Negro foster mothers were more apt to have originated from rural backgrounds and made the comment that "on the basis of PARI scores foster mothers from rural backgrounds had a distinctive tendency to avoid communication with the children." This characteristic represents a rather serious deficit in relation to foster children with retarded development because consistent verbal stimulation from articulate adults is an important factor in their mental and social development.

In the Milwaukee Study, Hebber and his associates (1972) reported that the children in their control group were significantly behind their experimental peers in language and the social and cognitive functioning associated with this basic skill. They attributed this lag to the fact that the main source of interpersonal communication for the control group was their siblings or intellectually disadvantaged and not very articulate mothers.

Before closing I will briefly summarize the principal points on which this chapter main thesis rests. The first is that foster home care for intellectually handicapped children is an invaluable social resource that has been hitherto largely ignored. Its suitability for this type of deprived child is suggested by the following points:

1. Its close resemblance to ordinary family living exerts a normalizing influence on the social development of a retarded child and assist in promoting his integration into the normal fabric of society. This is in contrast to the institutional experience which is alienating and reinforces deviance.
2. A substantial proportion of all children in foster care come from environments which have socioeconomic characteristics similar to those associated with a high incidence of mild mental retardation: overcrowding, poorly educated parents, low and unreliable income, and pathological patterns of parenting.
3. To compensate for their earlier depriving experience these socially deprived and intellectually stunted children require an exceptionally understanding and stimulating form of substitute care if they are to develop normal emotional, cognitive, and social functioning.
4. Foster family care lends itself to this sort of the rapeutic regime provided the undermentioned conditions are met:
 - (a) a systematic attempt must be made to select foster parents whose personality and perception of the fostering role indicate a special aptitude for managing handicapped children with the behavioural characteristics associated with organic impairment or social deprivation or both combined.

- (b) foster parents must be given substantial and consistent support in this challenging and unfamiliar task, through professional guidance in how to handle a retarded child and ongoing consultation to reinforce their efforts.
 - (c) the basic caretaking task of fostering must be supplemented by a battery of services, generic or specialized according to need, that will promote the physical, psychological, educational, and social development of the child.
 - (d) wherever feasible the child's natural parents should be kept in touch with the child and his foster home and the foster parents should be encouraged to support the foriners' interest in their child's progress.
5. The professional character that is now being ascribed to the function and role of foster parenting has a special relevance for mentally handicapped children due to the specialized skills and knowledge implicit in their care, and increased demands on time. Both points demand a reassessment of rates of reimbursement.
 6. This inevitable trend may encounter problems because traditionally foster parents have been recruited from lower socioeconomic segments of society, with modest living standards and limited education.
 7. Until a more intellectually sophisticated constituency of foster parents can be recruited from other social classes, a concerted effort is needed to educate the current reserve of foster parents about the special needs of intellectually handicapped children, including more subtle ones such as stimulation of speech and language.
 8. The example of involving endogenous personnel in community social welfare programmes has

demonstrated that lack of formal education need not be an insuperable barrier to efficient practice if appropriate training and guidance are available.

9. Research on foster home care for organically impaired children has indicated that specialized training within this setting can substantially improve their developmental progress.
10. Research on intact children remaining in their own socially deprived homes has highlighted the sort of intervention that is effective in neutralizing retarded cognitive and social development.
11. This intervention relates to stimulating interpersonal relationships and interchange and was carried out in an informal numerically small setting. The inference to be drawn is that a well planned, carefully structured foster care programme which combines these insights and techniques with regular child-rearing practices could have a similar preventive or rehabilitative impact.

The ideas, practical facts, and research perspectives that I have projected reinforce my frequently reiterated contention that foster family care is both feasible and desirable for the intellectually disadvantaged child. Although proven research from our field is slim, we can claim enough accumulated general evidence to carry our point and to indicate ways in which this emerging service can be extended, improved upon, and even garnished with innovative experiments that may benefit foster care as a whole.

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7

READING: ADDITIONAL TECHNIQUES AND RESOURCES

The approaches described previously, used selectively, are all useful for helping a student to make some initial progress in learning to read. This chapter provides some additional practical ideas which may be incorporated within the general programme to provide variety, enjoyment, motivation and additional practice for those students requiring extra assistance.

An important final section of the chapter looks at ways of improving comprehension skills in students who experience difficulty in extracting meaning from text.

Explicit Instruction in Phonics

It is clear from the research evidence that helping young children develop better sensitivity to the phonological aspects of language is a necessary but insufficient condition to influence early reading and spelling progress (e.g. Torgesen, Wagner and Rashotte 1994; Ayers 1995; McGuinness, McGuinness and Donohue 1995). Phonological training appears to be of maximum value when the auditory experience with speech sounds and syllables is combined with explicit instruction in letter-sound correspondences. Training activities need to

progress to the point where the connections between speech sounds and letters are thoroughly understood.

As a general principle, phonic knowledge and decoding skills should not be introduced and practised in isolation. Very important phonic principles can be established from children's daily reading and writing experiences. For example, a group of young children may wish to send a card to their friend Sam, who is in hospital. The teacher helps them to work out how to write the name by getting them to listen very carefully to each sound in the word. 'Let's say it slowly. Let's stretch it out. SSS-AA-MMM.' The teacher then helps the children to write the letter corresponding with each sound. She continues 'Now, let's write "We miss you". What letters do we need for "we"? Stretch it out: /W/-/EEE/. We write "w-e". Now "MISS". Who can tell me how "miss" starts? Good! /MMM/. Then /I-I/-/SSS/. Here is how we write "miss". Watch me.' Much valuable phonic knowledge is acquired in this informal way through writing. This is evident in young children's invented spelling, which reflects their current understanding of the alphabetic code. Basic ideas about phonics can also emerge naturally from shared-book experience and from rhymes, jingles and word-plays.

This informal approach to phonic skill acquisition is all that is required by many young children who are making good progress in early learning. However, it should not be assumed that this approach used alone provides sufficient coverage for students with learning problems. For some students, teaching phonic skills *only* from everyday reading and writing activities proves to be inadequate. In addition to these informal encounters with letter-sound correspondences, many students with learning difficulties need to have phonic skills taught much more directly. They also need regular and systematic

practice in the application of these skills. Most studies suggest that at least 30 per cent of children require explicit instruction in phonic decoding and encoding principles in the early stages of learning to read and write. Beck and Juel (1992: 101) have stated: 'Failure to teach the code in a straightforward manner can leave many children without the ability to independently enter the world of quality literature.'

Teaching letter-sound associations

The common associations between letters and sounds may be introduced in any order, and in practice, the order is often dictated by the nature of the reading material the children are using and the writing they are doing. However, when working with students who have difficulties in mastering basic phonics, it is useful to consider how the task of learning the letter-sound correspondences may be organized into a logical sequence.

Holdaway (1990) recommends beginning by selecting highly contrastive sounds such as /m/, /k/, /v/, and avoiding confusable sounds such as /m/ and /n/, or /p/ and /b/. There is certainly some merit in applying this principle in the beginning stages. It is also helpful to teach first the most consistent letter-sound associations (Heilman 1993). The following consonants represent only one sound, regardless of the letter or letters coming after them in a word: j, k, l, m, n, p, b, h, r, v, w.

Identifying initial consonants can be made the focus within many of the general language activities in the classroom. For example, when children are consolidating their knowledge of single letter-sound links, they can begin to make picture dictionaries. Each letter is allocated a separate page and the children paste or draw pictures of objects beginning with that letter on the appropriate page. The 'T' page might have

pictures of a Table, a Tree, a Tape recorder, and a Tricycle. Lists or charts can also be made with items grouped according to initial letter:

Children's names: Madelaine, Michelle, Martin, Mark,
Mary, Michael
Animals and birds: parrot, penguin, pig,
python, platypus

Vowel sounds are far less consistent than consonants in their letter-to-sound correspondences. After first establishing the most common vowel sound associations (/a/ as in apple, /e/ as in egg, /i/ as in ink, /o/ as in orange and /u/ as in up) variations are best learned later in combination with other letters when words containing these units are encountered (e.g. -ar-, -aw-, -ie-, -ee-, -ea-, -ai-, etc.).

With the least able children, it is likely that even more attention will need to be devoted to the mastery of letter sounds. This can be achieved through games, rhymes and songs rather than 'drills'. Stories can also be used to help establish links between letters and sounds. For example, the *Letterland* system developed by a very imaginative teacher in England, uses alliteration in the names of the key characters (e.g. Munching Mike, Ticking Tom, Golden Girl, Robber Red), to help the children associate and remember a sound with a symbol and to create a story link in the child's mind (Wendon 1992). This approach could easily be integrated into the shared-book programme. The pictograms used in *Letterland* are capital and lower-case letters with features superimposed. The h is presented as the Hairy Hatman who walks along in words whispering h, h, h, for hhairy hhat. The w is introduced as the Wicked Water Witch, with her two pools of water held within the shape of the letter. More complex combinations are also covered in the scheme. For example when /a/ (for apple) is next to /w/ (for Water Witch) the witch casts a spell which makes the apple taste awful, thus introducing the tricky /aw/ unit.

There are, of course, other programmes designed to teach phonic knowledge in a very systematic way. One example is *Alpha-Phonics* by Blumenfeld (1991), a step-by-step intensive introduction to phonics, beginning with the most basic letter knowledge and progressing to word-building and decoding. Another example of a very successful programme is 'Jolly phonics' (Jolly 1992). Also of value is Heilman's (1993) text. *Phonics in Proper Perspective*, which presents many practical ideas for classroom use.

Word-building experience

It is important that simple word-building and sound-blending activities are included as soon as the common vowel sounds and a few consonants have been taught. For example, adding the sound /a/ to the /m/ = am; adding /a/ to /t/ = at; adding /o/ to /n/ = on; adding /u/ to /p/ = up, etc. As well as reading these small units in print, the children should also learn to *write* them unaided when the teacher dictates the sounds. As simple as this basic work may sound, for many students with learning problems it is often the first real link they make between spoken and written language. It is vital that children who have not recognized the connection between letters and sounds be given this direction early. The only prerequisite skills required appear to be adequate visual discrimination of letter-shapes and adequate phonemic awareness (Mauer and Kamhi 1996).

An ability to deal with the concept of 'onset' and 'rime' appears to be important for early progress in reading and spelling (Adams 1990; Gunning 1995). The term 'onset and rime' refers to the way in which single-syllable words can be broken into a beginning sound (onset), and a unit comprising the vowel and all that follows it (rime). Examples: dog = onset /d/, rime /og/; shop = onset /sh/, rime /op/, etc. The rime units, in printed form, are often referred to as 'phonograms', although this term can also be applied to any other letter

strings which represent a consistent sound unit within words, such as -ight, -ous, pre-, un-, etc.

Practice for onset and rime can include the following activities, making new words by combining a given initial sound with the rime. At this stage, plastic letters may be used for word-building and blending (see also 'alphabet kits' below). Example: 'Add the sound and say the word'.

t: -ag, -en, -ub, -op, -ip, -ap

s: -ad, -ix, -un, -it, -ob, -et

e: -up, -ot, -ap, -an, -ub etc.

Attention may also be given to final sounds:

d: da-, ha-, be-, fe-, ki-, ri-, ro-, po-

g: sa-, be-, le-, pi-, di-, ho-, lo-, ru-, tu-, etc.

Experience in attending to the middle vowel in consonant-vowel-consonant (CVC) words should also be provided:

a: r-g, b-t, t-p, b-d, c-n.

e: t-n, p-g, n-t, f-d, g-m

i: p-n, b-t, b-d, r-g, etc.

Weisberg and Savard (1993) have discovered that young children's blending ability is greatly improved if they are encouraged to sequence the sounds in quick succession, rather than pausing between each phoneme. They claim that pausing between the sounds makes it much more difficult to combine the phonemes and pronounce the word. Direct training in this skill improved the children's performance.

Later these simple word-building activities can extend to the teaching of digraphs (two letters representing only one speech sound, as in sh, ch, th, wh, ph, etc.) and blends (two or three consonants forming a functional sound unit: br, cl, sw, st, str, scr, etc.).

sw: -in, -ing, -ell, -eep

ch: -eer, -in, -op, -urch, etc.

ck: ba-, de-, ro-, du-, etc.

For the highest level of proficiency in recognizing and spelling unfamiliar words, children need experience in working with longer and more complex letter-strings, such as: -and, -age, -eed, -ide, -ight, -ound, -own, -tion, etc. Gunning (1995) provides a useful core list of 101 of these most common phonograms.

It must be remembered that all word-building activities are used as a *supplement* to reading and writing for real purposes, not as a replacement for authentic literacy experiences. For example, the words used to generate certain important phonograms for children to learn can be taken from words encountered in their shared-book experience or from their daily writing. The aim is to help students recognize important phonic units and to seek out these pronounceable parts of words (Gunning 1995). As Stahl (1992: 620) indicates, 'Good phonics instruction should help make sense of patterns noticed within words'.

Alphabet kits

An inexpensive but extremely useful resource to use with beginning readers of any age is a set of plastic letters. For many years their use with dyslexic students has been strongly advocated for word-building and spelling practice. Jackson (1991) includes them as an important components in his approach for students with severe reading disability, and he devised a 'structured alphabet kit' to be used in individual tutorial sessions. The use of plastic letters also forms an essential part of Bryant and Bradley's (1985) programme to assist children to categorize and identify sounds. These writers suggest that the use of groups of letters, arranged to spell simple words in front of the child, allows for the removal of

a particular letter while still leaving the rest of the word visually intact. The child can then substitute other letters to make new words, and in doing so develop valuable insight into word structure and sound-symbol relationships. Plastic letters are used for precisely this purpose in the 'Reading success' programme (Reynolds and Dallas 1991).

It can be argued that the use of plastic letters adds a 'concrete' level of representation which some students may cope with more successfully than the purely auditory or purely graphic. Cashdan and Wright (1990) strongly support the use of such aids in not only helping the development of an awareness of the written language system, but also adding to the interest and enjoyment of the teaching session.

Building Sight Vocabulary

It is essential that children acquire, as rapidly as possible, a bank of words they know instantly by sight. Much of a child's learning in this area arises naturally from daily reading and writing experiences. The more frequently a child encounters and uses a word, the more likely it is that the word will be retained in the long-term memory.

Some students, particularly those with reading difficulties, may need to have sight words presented and practised more systematically. The use of flashcards can be of great value here. Playing games, or participating in other activities involving the reading of important words on flashcards, can help to provide the repetition necessary for children to learn to read the words with a high degree of automaticity. Immediate recognition of these words contributes significantly to swift and fluent reading of text.

Teachers often remark on the child who can recognize words on one day, but appears to have forgotten them by the next day. In part, this can be explained by what learning theory tells us about the acquisition of new knowledge (e.g. Gagne,

Briggs and Wager 1992). New information is not necessarily fully assimilated on first exposure. Acquisition of a correct association, say, between the oral form of a word in speech and the printed word-pattern on the page, involves two distinct stages. The first stage is that of recognizing the word and distinguishing it from other words when the teacher says it aloud. For example, given an activity where word-cards are spread out on the table, the teacher may ask: 'Kathryn, point to the word London, Dennis, pick up the card saying caravan. Show me the word castle', etc. The second stage involves recall of the word from long-term memory without prompting. The teacher shows the child a particular word on the card and asks. 'What is this word, Mary? Read this word to me, Dermot.' Children with learning problems usually need much more practice at stage one (aural/oral matching to print) than teachers realize. Often the children are expected to recall the words from memory before they have had sufficient practice at matching the spoken word to the printed equivalent. A learner cannot retrieve from long-term memory material that has not been effectively stored through adequate exposure and practice.

So important is basic sight vocabulary acquisition to early reading progress that many writers have produced lists of words, arranged in frequency of usage, beginning with the most commonly used words (e.g. McNally and Murray 1968; Preen and Barker 1987; Gillet and Bernard 1989). The list below contains the first fifty most commonly occurring words derived from those lists.

a I in is it of the to on and he she was are had him his her
am but we not yes no all said my they with you for big
if so did get boy as at an come do got girl go us from little
when look

Other high-frequency sight words, often confused by beginning readers include:

were where when went with want which will
here there their they them then

For a comprehensive list of important sight words refer to Preen and Barker (1987).

Additional Techniques and Resources

Games and apparatus

In almost all texts dealing with remedial or corrective reading teachers will find abundant encouragement to use games and word-building equipment as adjuncts to their programmes. Games, it is argued, provide an opportunity for the learners to practise and overlearn essential material which might otherwise become boring and dull. Such repetition is essential for children who learn at a slow rate or who are poorly motivated. The use of games and equipment may also be seen as 'non-threatening', serving a therapeutic purpose within a group or individual teaching situation.

There can be little doubt that well-structured games and apparatus can perform a very important teaching function. However, it is essential that a specific game or piece of equipment has a clearly defined purpose and that it is matched with a genuine learning need in the children who are to use it. The material should contribute to the objectives for the lesson, not detract from them. Too often games are used in a very random way, almost to amuse the children or to keep them occupied. While this may be justified on therapeutic grounds it cannot be defended pedagogically. A study carried out by Baker, Herman and Yeh (1981) with second and third-grade children found that the unstructured use of games, puzzles and supplementary material was *negatively* related to achievement in reading and mathematics.

It is also important that the use of games or apparatus be closely monitored by an adult, if time is not to be wasted by the children and if the material is to be used correctly.

Multisensory or multimodal approaches

The names Fernald, Gillingham, Stillman and Orton usually come to mind when multisensory approaches are mentioned. All of these educators advocated methods which use as many channels of input to the learner as possible. The methods usually involve the learner finger-tracing over the letter-shape or word-shape to be mastered, or tracing it in the air, while at the same time saying and hearing the auditory component and seeing the visual component.

The Fernald approach involves four stages:

- First the learner selects a particular word which he or she wants to learn. The teacher writes the word in blackboard-size writing (cursive) on a card. The child then finger-traces the word, saying each syllable as it is traced. This is repeated until the learner feels capable of writing the word from memory. As new words are mastered they are filed away in a card index for later revision. As soon as the learner knows a few words these are used for constructing simple sentences.
- The second stage involves the elimination of direct finger-tracing and the child is encouraged to learn the words through studying their visual appearance and then writing them from memory. This stage improves visual imagery and may thus be used also for remedial instruction in the correct spelling of irregular words. The words are still stored on card and used for frequent revision. The material is usually consolidated by the child producing his or her own small books.
- The third stage continues to develop visual word-study techniques and encourages a more rapid memorization of the words, followed by swift writing. The word-card drill is usually retained only for particular words which give difficulty. At this stage

the child also begins to attempt to read new material prepared by the teacher.

- The final stage involves the child becoming almost entirely independent in his or her reading skill, having generalized an understanding of word structure and having been helped to make use of contextual cues.

The Gillingham and Stillman and the Orton approach are basically the same as the Fernald approach, employing a visual-auditory-kinaesthetic-tactile (VAKT) method. The only significant difference is the emphasis given to sounding-out rather than slowly pronouncing the word during the finger-tracing stages. More attention is given to learning the letter sounds and applying these in word-attack.

It can be argued that multisensory approaches using several channels of input simultaneously help a child to integrate, at a neurological level, what is seen with what is heard, whether it be a letter or a word. On the other hand VAKT approaches may well succeed where other methods have failed because they cause the learner to focus more intently on the learning task. Whatever the reason, this teaching approach, which brings vision, hearing, articulation and movement into play, does appear to result in improved assimilation and retention. It is obviously easier to apply this approach with younger children; but in a one-to-one remedial situation it is still a viable proposition with older students.

Carbo (1996) suggests that, where possible, choice of teaching approach should capitalize on students' preferred learning modalities. For some students, emphasis on phonemic awareness and phonic skills may not produce the best results; for them a predominantly visual memory approach may be indicated. For others, the use of multisensory resources and techniques bring about improved learning. Again, this is easier to accomplish in an individual tutorial session, rather than in a large class.

The overhead projector

The overhead projector can be a useful aid for presenting aspects of both reading and spelling in a predominantly visual way. Many teachers make their own transparencies and use colour to good advantage in developing word study skills. The overhead projector is also useful in presenting cloze exercises and preparing word webs, both of which are described below.

The tape recorder

The cassette tape recorder is also a useful resources in the remedial reading situation. Teachers can make their own instructional programmes for use with this equipment. The programme may be nothing more ambitious than the pre-recording of popular stories which the children can listen to through headsets while following the text in the book. In this way more difficult material can be presented which would otherwise be at frustration level for the child. Other uses of tape may be to programme aspects of phonic work or spelling assignments, or to set comprehension activities involving questions at literal, interpretive, critical and creative levels.

The use of popular songs on audio-tape provides repetition with enjoyment and has proved to be useful in remedial or special class situations. A zig-zag book containing the words from a current song can be prepared for the child or for a small group. The children follow the words in the book as the song is played from a cassette. Later the words are read without the music and some key words may be put on flashcards to be recognized out of context.

The use of comic strips

The use of picture material from children's comics and cartoons can provide an enjoyable and motivating beginning-reading approach for primary or very slow-learning secondary students.

The children select a comic strip. They number each individual picture in logical sequence and cut and paste each picture in the top half of a blank sheet of A4 paper. They can dictate their own interpretation of the 'story' to the teacher or other tutor (e.g. parent, peer, aide). The teacher prints the words for each story below the appropriate pictures, reading these back to the child and then asking the child to read them unaided. Finally the pages are secured together and a cover is made. The children can then share their small booklets with others in the class. The story dictated by a child does not have to be identical with the one intended by the artist. The teacher should accept the children's own versions.

During the process of writing down the child's dictated story the teacher can draw attention to certain single letters and letter groups in order to begin to develop some basic word-attack skills. Words which are particularly difficult but important are put on flashcards for revision and practice. At a later stage the child copies the story into his own book. Gradually the child will be able to construct more of the story without adult help.

Another possible use of comic strips and cartoons for remedial reading and writing involves the removal of the captions or the speech balloons using some form of correcting fluid or white ink. The child then discusses with the teacher what the characters might be saying and is helped to write the words into the speech balloons. These are then read to the teacher and other children.

Rebus reading approaches

Any approach which uses a picture of symbol in place of a particular word may be described as a 'rebus' approach. The method allows a child to feel that he or she is reading at a functional level by replacing difficult nouns or concepts with a picture or symbol. A simple illustration of this principle is presented below from a series called *Truckin' with Kenny* (Rogers 1982).

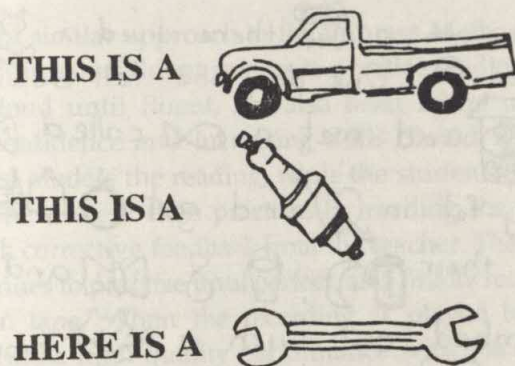


Fig. 7.1 The rebus approach

It is an approach which can serve to boost confidence in the early stages and can allow a story-line to be developed without tight constraints of vocabulary control.

The rebus approach can also be adapted as a group activity, where children work together to construct the story which is then read aloud to others. This provides opportunities for children at all levels of ability to contribute and is a useful example of inclusive practice. The example in figure 7.2 was collected from a group of primary students.

The Impress Method

The Impress Reading Method is a unison reading procedure in which the student and the teacher read aloud together at a natural rate. The student is permitted to use the index finger to keep the place on the page, and may even be physically guided to do so by the teacher.

The Impress Method is particularly useful when a child has developed some word recognition skill but is lacking in fluency and expression. It is recommended that sessions should last roughly fifteen minutes and be provided on a very regular basis for several months. It may be necessary to repeat

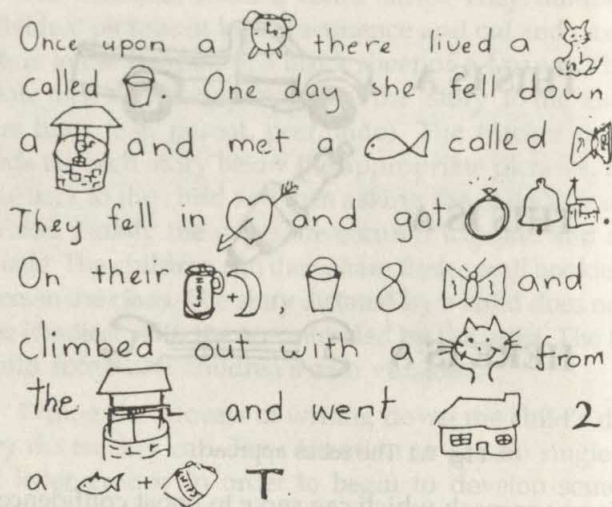


Fig. 7.2 Example of a group rebus approach

the same sentences or paragraphs several times until the student becomes fluent at reading the material alone.

The Impress Method is very appropriate for use in peer tutoring, where one child who is a better reader provides assistance for a less able friend. In such cases the 'tutor' usually needs to be shown how to act effectively as a helper.

Eldredge (1990) has had good success using a variation of read-along with a group of poor readers. He uses the term 'group-assisted reading' to describe an approach which uses reading in unison to emphasize correct phrasing, intonation and pitch. The decoding burden is removed, allowing students to concentrate upon meaning. Eldredge's system involves reading a challenging text several times with the students while each student follows or tracks the print in the book. Students then practise the reading in pairs without teacher assistance. Significant achievement gains in reading comprehension and vocabulary were reported.

Repeated readings

A very similar approach to the Impress Method, which simply requires non-fluent readers to practise reading a short passage aloud until fluent, has also been found useful in building confidence and increasing skills (Bowd 1990). The teacher first models the reading, while the student follows in the text. The student then practises by reading the material aloud, with corrective feedback from the teacher. The student then continues to practise until perfect, and finally records the reading on tape. When the recording is played back, the student hears a high-quality performance which is equal in standard to the reading of even the most competent student in class. This is an important boost to this student's confidence and self-esteem.

Word processors

Word processors can be used most effectively to help students acquire confidence in creating their own reading material (Montague and Fonseca 1993). It has been suggested that the use of word processors for desk-top publishing adds a valuable new dimension to the language programme in any classroom (Wray and Medwell 1989). Creating and printing one's own stories can enhance a child's interest in books, and at the same time develop skills in composing, editing, proof-reading, spelling and design.

At a more basic level computer programmes exist which will help students to improve their word recognition, decoding, sentence completion and spelling skills. For example, a target word may be displayed on the screen and the student required to copy it using the keyboard. The word is then embedded in a sentence for the student to read and copy. The word is presented again with the initial letter missing and the student is required to complete it. Gradually the cues are removed until the student is reading and writing the word correctly with a high degree of automaticity.

Computer programs can also be used to improve comprehension skills (Anderson 1990), and programs can be devised to provide additional study material related to texts and novels being used by the class (Wepner 1991).

In general, word processors are valuable because they integrate reading with writing and require the student to interact with the text which is being presented. Computers are infinitely patient, allow for self-pacing by the student, present material in carefully sequenced steps and provide immediate feedback. Students are required to be active throughout the learning session and are found to have higher levels of motivation when working at the keyboard (Loughrey 1991). Whether used by one student alone, or by students working together, the computer is an excellent tool within the regular classroom.

In the home situation the computer can aid literacy development. Children can work with a parent on early reading skills, such as word recognition, simple spelling and following instructions (Rickleman and Henk 1991).

Listening to Children Read

Regardless of which approach or blend of approaches a teacher decides to use in working with individual children, listening to the child read aloud should be an essential part of the programme. It permits the teacher to monitor such features as self-correcting behaviour, use of context, word-attack skill, fluency and phrasing. This writer has found it valuable to use such time as a 'reading together' experience, rather than merely listening to the child read. Having selected an appropriate book the session may take the following form.

- You (the teacher) volunteer to read the first page or two while the child follows in his or her copy of the book. The teacher's fluent reading of the text serves not only to model appropriate expression and rate but

allows the child to get the flavour of the story. Names of characters will have cropped up and topic-specific terms will have been encountered by the time the child's turn comes to read. Allow the child to finger-point to keep the place in the text if necessary, rather than become lost and left behind in the story.

- Now invite the child to read the next page or half-page. As you listen to the performance anticipate any difficult words and simply provide them to maintain continuity and meaning.
- Praise the child briefly for the reading, then continue yourself with the next page.
- Again invite the child to read the next page, providing help only when necessary. Don't destroy continuity by suggesting that the child sound out a word. You might, however, suggest that the child read the rest of the sentence if he or she can't recognize a word. This will usually enable the reader to self-correct or make a contextual guess.
- After reading at least four or five pages together in this way, the child will feel that a significant part of the story has been read. Indeed the story content (plot) will be emerging and a few minutes may be spent in talking about the key points to aid recall and comprehension. (This approach might be contrasted with the typical classroom ritual of hearing a child read one page, then marking his or her card and putting the book away until the next day or later in the week. So little of the actual story is covered each day that it is almost impossible for the child to understand what it is really about. The least able readers suffer most in this system.)
- In later sessions the amount that you read is gradually

reduced, allowing the child more time to perform independently. It is at this stage that you can gain insights into the child's skills by attending to the nature of miscues which may occur from time to time.

- It is important that a child be helped to read a significant amount at each session. By breaking into the vicious circle of 'I can't read well—so I avoid reading—so I don't get much practice—so I don't improve', you are able to prove to the child that he or she is, indeed, making progress. Some form of daily charting of pages read can be very useful here.

It is important to aim to make the child an *independent* reader. The amount of correction and feedback given to a low-ability reader may tend to maintain that child's dependence on adult support and guidance. Frequently the feedback tends to be drawing the child's attention to the phonic properties of a word, or simply supplying the word, rather than helping the reader to pick up cues from context and thus become more independent in performance. Less frequent and less direct support seems to provide more opportunity for the child to self-correct and maintain attention to meaning. In particular, teachers should pause longer before prompting a student.

Pause, prompt, praise (PPP)

A procedure known as 'pause, prompt, praise' was developed by Professor Glynn and his associates at the University of Auckland. It has been applied very successfully in many remedial intervention programmes, and can be taught to parents, aides, peer-tutors and volunteer helpers in schools as a strategy to use with the children they are assisting (Pumfrey 1991; Wheldall 1995).

The procedure involves the following simple steps:

- the child encounters an unfamiliar word;

- instead of stepping in immediately and giving the word, the teacher/tutor waits a few seconds for the child to work it out;
- if the child is not successful, the teacher/tutor prompts the child by suggesting he or she perhaps guess from the meaning of the passage, or attend to the initial letter, or read on to the end of the sentence, etc.;
- when the child succeeds in identifying the word he or she is praised;
- if the child cannot get the word after brief prompting, the teacher/tutor quickly supplies the word;
- the child is also praised for self-correcting while reading.

Wheldall (1995) reports that low-progress readers make significantly more progress when tutored by volunteers trained in PPP than when tutored by untrained personnel. When combined with specific instruction in phonics and decoding, PPP resulted in an average increase in reading age of nearly fourteen months from seven weeks of daily tutoring in Wheldall's study.

Silent Sustained Reading (SSR)

Silent Sustained Reading describes a specific period of time set aside each day in the classroom for students and the teacher to read material of their own personal choice. Often ten or fifteen minutes of the afternoon session are devoted to SSR across the whole school.

Fenwick (1988) reported the SSR, if well implemented, can result in students engaging in much more reading activity than previously. He states that in doing so, the students gradually develop their ability to concentrate on reading for longer periods. In some cases, the students are seen to become more discriminating readers and the range and quality of what

they read improves. Fenwick also reports the development of a more positive attitude toward reading.

If SSR is implemented inefficiently it can result in students wasting time. A problem emerges if students with reading difficulties select books which are too difficult for them to read independently. Teachers need to guide book choice to ensure that all students can successfully read the material during these silent reading periods. Biemiller (1994: 206) warns that poor readers often spend substantial periods of SSR time 'covertly avoiding reading'. If true, this situation needs to be rectified.

Comprehension

Reading comprehension is not something which comes *after* learning the 'mechanics' of reading. Reading for meaning must be the focus of any literacy programme from the very beginning. Even in the earliest stages of reading acquisition, children should discuss and answer questions about what they read. When teachers read stories to children they should discuss the material and encourage children to think about and criticize the ideas in the story.

As long ago as 1969 Nila Banton Smith identified four levels of comprehension, each level containing a cluster of component skills and each being dependent upon competence at the previous levels. The most basic level is referred to as 'literal comprehension' (understanding, at least superficially, the basic information which is being presented). This level is dependent upon such subskills as: understanding word meanings; recognition of main idea; grasp of sequence and order of detail; and recognition of cause-and-effect relationships when these are stated in the text. To a large extent even this level depends upon the learner's own previous knowledge and experience. If the concepts being presented are very new, even literal comprehension and recall will be difficult. This raises the question 'Is reading a text the best way of

introducing a new and unfamiliar topic?' For some learners the answer is certainly 'No'.

The second level of comprehension is 'interpretation'. This involves going beyond what is actually presented in the text, inferring and reading between the lines and drawing conclusions. Subskills at this level include making generalizations, predicting outcomes, reasoning cause-effect when these are not stated and discovering relationships.

The third level of comprehension is 'critical reading'. This involves judgement of the quality, value, accuracy and truthfulness of what is read, detecting bias or overstatement.

The final level is referred to as 'creative reading'. At this level the reader goes beyond the writer's material and generates new ideas or develops new insights which were not explicit in the text.

It is argued that in many classrooms comprehension exercises rarely demand responses other than at the literal (factual recall) level. While this level is important, since it is basic to the other three levels, a programme which sets out to develop comprehension skills in children should include questions (oral and written) which demand some thinking at the interpretive, critical and creative levels. For example, following a short story about the crash of a passenger aircraft these questions might be posed:

- How many passengers escaped the crash? (literal)
- Why did the failure of cabin pressure lead to the crash? (interpretive)
- From the way he behaved before the crash what kind of man do you think the pilot was, and could his judgement be trusted? (critical)
- Many air crashes involving loss of life occur each year.

How might flight be made a safer method of transport? (creative).

If a child has difficulties in comprehending what is read, particularly at the first two levels, it is worth considering whether there is a serious mismatch between his or her own vocabulary knowledge and the words being used to convey the information in the text. A child may be able to read a word correctly but not know (or may misunderstand) its meaning. In such cases there is a need to devote more time to word study and vocabulary building when comprehension activities are used in classroom.

Children who read very slowly or much too fast often comprehend poorly. Attention to rate of reading is thus indicated as a specific intervention in some cases.

For some children, the actual recall of information is poor. Recall is dependent upon attention, vividness of content, intention to remember, rehearsal and any connections with the reader's previous experience. These factors may help to identify why a particular child is having problems.

Improving comprehension

According to Dole *et al.* (1991) there are five key components to successful comprehension of text; locating the main idea; drawing inferences; generating questions; monitoring one's own understanding; and making a summary. Research has indicated that these aspects of comprehension can be improved if given due attention, and if taught explicitly as components of an integrated study skills strategy (Pressley *et al.* 1995). In particular, students with reading difficulties appear to benefit from specific training in self-monitoring and in summarizing (Malone and Mastropieri 1992). However, it must be noted that this type of strategy training is time-consuming and effort-intensive, with effects often taking months to occur (Dole, Brown and Trathen 1996).

Cole and Chan (1990) have reviewed the classroom-based research on what is known as 'reciprocal teaching'. In this approach to the improvement of study skills, teachers and students work together in the initial stages, sharing ideas, generating questions which may be answered by a specific text, predicting answers, checking for meaning and finally collaborating on a summary. The teacher's role is one of demonstrating effective ways of gaining meaning from text; but the long-term aim is to have the students internalize these strategies for themselves.

The reading comprehension skills of all children can be increased when teachers spend more time modelling and demonstrating strategies such as:

- previewing material before it is read to gain an overview;
- locating the main idea in a paragraph;
- generating questions about the material by 'thinking aloud';
- predicting what will happen;
- summarizing or paraphrasing the content.

Fielding and Pearson (1994) suggest that a successful programme for the development of comprehension should include four components:

- large amounts of time devoted to text reading;
- teacher-directed instruction in comprehension strategies;
- opportunities for peer and collaborative learning using texts;
- occasions provided for students to talk with the teacher and with one another about their responses to a particular text.

Hints for developing comprehension skills

The following specific suggestions may help to improve the comprehension of all students, but are particularly applicable to with learning difficulties.

- Ensure that the material presented is interesting to the child and at an appropriate readability level.
- Always apply comprehension strategy training to real texts and read the texts for some genuine purpose. Don't rely upon contrived comprehension exercised used in isolation.
- Prepare for entry into the printed material. Ask, 'What might we find in this chapter? What do the illustration tell us? What does this word mean? Let's read the subheading before we begin', etc. Refer also to the PQRS strategy.
- Encourage students to set comprehension questions for each other; then use these questions to discuss what is meant by critical reading, inferring, predicting, etc.
- Read through any comprehension questions *before* the story or passage is read so that the student enters the material knowing what to look for.
- Use daily newspapers and magazine articles as the basis for some class-room discussion and comprehension activity. Highlighter pens can be used to focus upon key ideas, important terms, facts to remember, etc.
- For the more limited readers make frequent use of instruction sheets which the student must read, interpret and act upon. For example, instructions for a simple science experiment; following a recipe: making a model.

- Making a summary is an excellent way of ensuring that students have identified main ideas.
- In general, make sure that students are aware of the goal in reading a particular text. Teach them how to make use of strategies which will help them to extract meaning from what is read. Don't simply test comprehension, teach it!

The cloze procedure

Cloze procedure is a simple approach designed to make a reader more aware of context cues and meaning as aids to guessing unfamiliar words. The procedure merely requires that certain words in a sentence or paragraph be deleted and the reader asked to read the paragraph and supply the possible words which might fill the gaps:

It was Monday morning and Leanne should have been going to sch..... She was still in She was hot and her throat was

'I think I had better send for the d. . . . ' said her 'No school for you.....'

Variations on the cloze technique involve leaving the initial letter of the deleted word to provide a clue; or at the other extreme, deleting several consecutive words, thus requiring the student to provide a phrase which might be appropriate. The use of the cloze procedure can be integrated as part of the shared-book experiences already described.

These cloze activities can involve group work. The prepared paragraphs are duplicated on sheets for the children or displayed on the overhead projector. As a group the children discuss the best alternative and then present these to the teacher. Reading, vocabulary and comprehension are all being developed by a closer attention to logical sentence structure and meaning.

Graphic organizers and word webs

Another useful activity which aids comprehension and study skills is that of 'word webbing'. The process of word is also known as 'thought mapping' or 'concept mapping'. The 'web', or diagram, produced is often referred to as a 'graphic organizer'.

Word webbing is advocated as a way of preparing the student for entry into a text and for recording information while reading (Hickerson 1992). It is also useful for organizing ideas prior to writing on a new theme. Charts containing key words to be encountered in the text are prepared in advance by the teacher, or the teacher and students together brainstorm ideas and write key words on the blackboard. Tentative connections are made between some of the words, and these connections are discussed. As the reading of the text proceeds, new connections are made and additional important words added to the web.

Figure 7.3 illustrates a word web relating to a magazine article which has an illustration of a woman changing the tyre on her car on a country road.

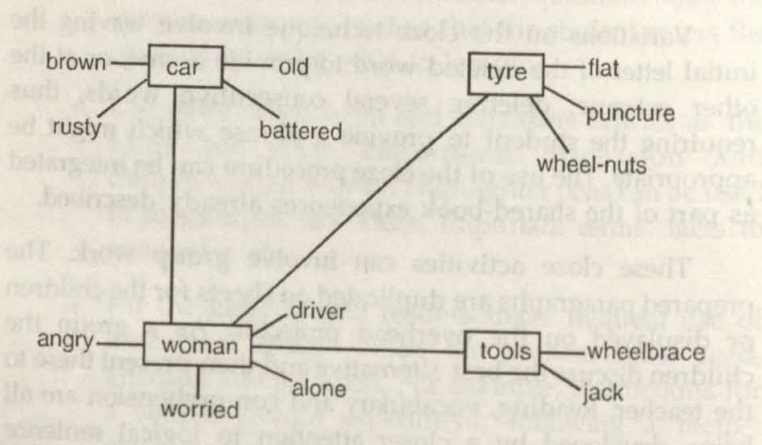


Fig. 7.3 A word web

Word webs help students to organize their thoughts and link new ideas with what they already know. The final chart serves as a useful aid for students when they begin to write a summary for the topic studied.

When students have become proficient at word webbing they may use the technique as individuals, or apply it collaboratively in groups.

Over to you: Developing a comprehension strategy

- Read through the sections in this chapter dealing with comprehension.
- Select a novel, a magazine article or a subject textbook which is suitable for the students you teach. Devise a procedure which you could use with the students to study and extract meaning from the material you have selected.
- Don't forget the importance of your own modelling of important strategies.
- How might you extend the activity into independent practice for the students?
- How will you attempt to provide for generalization of the new strategies to other reading materials?

Summary

This chapter provided some additional ideas for teachers to use when adapting a reading approach for an individual student's needs. Many of the techniques mentioned are not, in themselves, total approaches to reading; they can be used to complement and extend existing approaches. The majority of students will not require major adaptations to their programme, but where appropriate, these suggestions may help to maintain a student's interest and enjoyment while at the same time providing successful practice of essential skills.

When programming for special assistance in reading the teacher must constantly keep in mind that the long-term goal

is to help the student become an independent reader, capable of reading for pleasure and for information; and in the case of the student with intellectual disability, reading for social competence. The teaching of phonic skills, word-attack and so forth must never become an end in itself, but must be recognized as a step on the ladder to fully functional reading ability.

All teachers, and all helpers in learning assistance programmes, should develop skills in listening to children read and providing appropriate support and feedback. Advice on this issue was provided in this chapter.

The suggestions for improving comprehension skills presented above have wide application and should readily find a place in the whole class programme.

DISCUSSION POINTS

- Which of the techniques or approaches described in this chapter could be used with adults who have literacy problems?
- If you gave me a pencil and paper, or a blackboard and chalk, I could teach a child to read.' Give your views on this statement.
- Discuss some of the difficulties a teacher might encounter in trying to apply in a mixed-ability classroom some of the strategies and techniques described in this chapter. How might these problems be minimized?
- What are your views on using Sustained Silent Reading periods in school?

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FINDINGS FROM A PROGRAMME FOR NON- RETARDED, LOW INCOME PRESCHOOL CHILDREN¹

All children in western society require enough education to prepare for the vocational complexities of a technologically based civilization. Yet children from low income families frequently have trouble with academic tasks when they enter elementary school. This is a cross-cultural phenomenon hardly confined to this country (Davie, Butler, Goldstein, 1972; Thorndike, 1973). Several years ago the mounting, and indeed hierarchical, nature of this educational handicap as the low-income child proceeds through higher and higher school grades was identified as a "cumulative academic disadvantage" (Deutsch, 1965) whose roots are already established by the time the child has entered school, compounding whatever inadequacies the school has in dealing with the problem.

Children at the high end of the mental retardation continuum, the mildly retarded, enter school at a lower level of academic functioning than those from the low income

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population. Thus, they may demonstrate the cumulative academic disadvantage earlier in their school careers. However, the educational problems of the low income and the mildly retarded populations appear very similar, with considerable demographic overlap between the two populations (Stein and Susser, 1970) suggesting that a preventive programme found effective thus far for the low income population may have similar hopeful implications for the mildly retarded.

Family as Cognitive Resource

The prevention or amelioration of mild retardation may ultimately rest where society has its beginnings, the home. This chapter is, most literally, a message from home, both in its abstract sense and in some of its concrete manifestations. In this study, the data come from the homes of 93 low income mothers who have been actively engaged in the Verbal Interaction Project's Mother-Child Home Programme in their own homes to prevent educational disadvantage in their 2- to 4-year-olds. By age 2 years, before the programme began, the mean group IQ of their children, reported in many studies to be normal in infancy for all populations in this country (e.g., Bayley, 1965), had apparently already started on the downward slide to a point above the edge of retardation but one predictive of educational disability. That trend was reversed when the mothers became more directly involved in the education of their youngsters than had been hitherto allowed by poverty and insufficient awareness by the parents of the importance of incorporating simple verbal interaction techniques into their play with the children.

The family, embodied in the dyadic mother-child relationship within the home, appears to provide a potent system to foster the child's cognitive development. To release the power of that system, certain crucial conditions appear necessary in an intervention programme. These conditions seem to be met in the Mother-Child Home Programme. That

they are not all present in other systematically researched programmes with a home visit component (Gordon, 1969; Gray and Klaus, 1965; Karnes et al., 1970; Payne et al., 1973; Schaefer, 1969; Weikart and Lambie, 1968) is no more surprising than that school-based programmes also differ greatly from each other. But the differences among such programmes in long term effectiveness has been recently noted (Bronfenbrenner, 1974).

Theoretical Foundations of the Mother-Child Home Programme

The theoretical base of all parent-involving programmes includes a belief in the profound importance of parents as primary change agents or teachers of their own children. The Mother-Child Home Programme (MCHP) added to this the idea that the "teaching" should occur at home through concept-building verbal interaction, in play around permanently assigned, perceptually rich and ordered stimuli, and should be embedded in the affective matrix of the child's most enduring relationships, especially that with his mother. Further, the intervention to assist this process must be through means which provide maximum motivation for mother and child (and home intervener-visitor). It should cause minimum disturbance to their relationship, especially since the optimum time in the child's life for the intervention is between ages 2 to 4 years, partly because of the peaking then of that relationship.

These propositions were developed from an interdisciplinary, far flung network of theory and investigations concerning the disparate, yet often intertwining, roles in the child's intellectual development of language, of early family relationships and motivations, of sensory-motor development, of play, and of optimum age periods for intervention.

Most fundamental was a belief in the critical role of language in cognitive development and in the assumption that man's most distinctive attribute is his capacity both for

abstract conceptualization and for symbolization of abstract thought through language. Sapir (1962) was among the first to pronounce language a perfect symbol system, the vocal actualization of the human tendency to see reality symbolically. He posited the language may originate through vocalization of the "abstract attitude," summarizing numerous concrete perceptual-conceptual encounters. This theme was expanded philosophically by Cassirer (1944) but with so many references to empirically based evidence (from the language of a central Brazil Indian tribe to the early learning of Helen Keller) to make his discussion almost as much a far ranging review of actual observation in theoretical reflection. Werner's seminal theories of symbol formation (e.g., 1967), close related to Cassirer's, were also supported by the work of investigators such as Vygotsky (1962) and Rapaport (1945), who cited experimental evidence for the development and greater efficiency of language as a verbal symbol system for abstracting and summarizing common traits among unlike experiences, as compared to the compilation of man's concrete instances to convey a general concept. Bruner et al. (1966) provided a useful stage-referenced framework for viewing the development of symbolization in children dividing the attainment of symbolic representation of reality into three steps: the enactive (to about the end of the 1st year of life), the iconic (imaginal predominance which may persist in very primitive societies as a dominant mode of presentation in adult life), and finally, the symbolic, which begins when the child, who formerly employed words only as labels for immediate experience, uses words to generalize the common attributes of many such experiences and so uses words as verbal concepts.

Bruner had noted in an earlier article (1964) that the process of internalize language as the child grows older probably depends on his interaction with others in which was called by Brown the Original Word Game (1958). Bruner commented that this may end up by being the Human Thinking Game, a phrase which neatly encapsules what may well be the most important underlying function of language, superseding its communication aspects. A similarly economical

summarization is furnished by Sigel's (1971) "distancing hypothesis," which elaborated Werner's observations on the function of language as an aid to abstract conceptualization. Sigel took the theory a step further by proposing that children need practice in using language to represent increasingly distant referents: their intellectual development, those most out of sight, for example, requiring the abstract use of language.

The emphasis on the importance of language interaction with others leads inevitably to considering the relationship of language-induced conceptual growth within the family and the contrasting cognitive development of middle and low income children. Bernst (e.g., 1961) was perhaps the most influential of those who suggested that patterns limited abstract language (and syntax) exchanges in British families of working class children might account for parallel limitations in the children's intellectual development. When Hess and Shipman tested this idea with the families of Black American middle class and poor children, they found enough support in their data to conclude: "The structure of the social system, and the structure of the family, shape communication and language; and language shapes thought and cognitive styles of problem solving" (1965).

Whatever the constructions on concept-building verbal interaction in low income families, the studies detected no significant differences in the amount of warmth and affection present in middle income and low income families. Observers like Bernstein, and Hess and Shipman, had noted a tendency in low income families toward "status" orientation rather than "person" orientation, but this was a difference in social, interpersonal style, not in feeling. It was obvious that healthy mother-infant attachment was developing through the interaction of mother and child, regarded as essential to this basic attachment by many investigators of family relationships, notably Bowlby (1952) and Ainsworth (1967; 1973). Increased

parent-child interaction was also functional for monkeys (Harlow, Harlow, and Suomi, 1971; Ruppenthal, Harlow, Eisele, Harlow, and Suomi, 1974). Indeed, the quality of that interaction may well influence the child's development of competence (Ainsworth and Bell, ERIC reports). This appears to be especially true in relation to language development (Eveloff, 1971). It is noteworthy that an early home-centred intervention programme (Irwin, 1960) demonstrated its effect on language through the mother's reading stories to her child, thus utilizing the enhancement of mother-child interaction in its conative as well as cognitive aspects. Many mothers, particularly those of the college-educated, middle income group, carry on such "intervention" spontaneously, as part of a now well known "hidden curriculum" of the family. Increased cognitive development results for the child. Schaefer, indeed, suggested that early, basic informal home education be given a name, "Ur-Education," and be recognized as a legitimate supplement to conventional academic education (1970). Implicit in the concept is the inseparability of the mother-child emotional interchange from the cognitive interaction, and intermingling of cognitive stimulation and deepening of the attachment between the mother and child. The futility of trying to separate the two factors conceptually in their deprivation consequences seemed amply demonstrated by Bronfenbrenner in his meticulously documented review of the effects of early deprivation on human and animals (1968).

One of the most remarkable and valuable features of "Ur-Education" is that the Teacher (mother) and Student (child) involved in it need little incentive beyond the interaction itself and the activities attached to it, so strong is the motivation provided by what Bronfenbrenner once noted as "that irrational affect called love." But certainly the interaction, and especially the verbal interaction, will be very much reinforced by stabilizing a "situation" (Cazden, 1970) rich in potentialities for encouraging conversation and its concomitants. Such interaction also effects the development of sensory-

motor skills in the child through "reafference" (sensory feedback accompanying self-initiated movement, described by Held, 1965), as well as the utilization and encouragement of the child's intrinsic motivation to master the environment through play (Hunt, 1961, 1969; White, 1963). The child's intrinsically motivated play, self-motivated and self-rewarding (Ellis, 1973; Millar, 1968), is probably also self-teaching. The youngster's problem solving, using materials with many motor, perceptual, and conceptual properties matches to his maturational stage, can, in itself, benefit cognitive development (Burner, 1972; Hunt, 1969). It seems obvious that the "situation" should be playful, and centred about durable, attractive toys and picture books owned by the child so that they can be used again and again, with constant reinforcement of the intermingling of the conative and the cognitive (especially the verbal).

The interaction between mother and child, embedded in the attachment relation between them is a major component of the cognitive stimulation of the child. The stimulation probably begins almost at the infant's birth. If verbal interaction is a central feature of the cognitive stimulation, the full effects of the cognitive stimulation begin to have their impact as the child is emerging from the stage of sensory-motor learning into the period of what Cassirer called "reflective intelligence," a stage signalled and reinforced by beginning language development. This occurs at about age 2 years. This age also coincides with heightened attachment to mother (Maccoby and Feldman, 1972), greatly increased curiosity about the environment, and developing sophistication in the use of limbs for walking and manipulation, in short, with a near explosion of rapidly developing skills and feelings. By about 4 years the child has incorporated the main effects of the revolution and begins to be impatient to turn to experiences outside of the mother-child relationship (Bronfenbrenner, 1968). If the cognitive possibilities of this age period have for some reason not been fully exploited, perhaps

because of the constrictions put on parents by poverty, then the child's intellectual development may already have taken the downward turn which is so handicapping to academic achievement (e.g., Bloom, 1964). Logic and the evidence seem overwhelmingly to indicate that intervention to prevent the cognitive dip should occur between the ages of 2 and 4 years, as the optimal, and possibly critical, period for preparation for school learning.

Response from the Professional Field

A little more than a decade ago, tremendous impetus was given to the whole field of early childhood intervention research by the appearance of Hunt's review of the role of environment in the growth of individual intelligence (1961). It promised new hope for the prevention of the personal tragedy and social problems generally posed by the educational disadvantage of the poor. Attempts were made to provide, in carefully structured preschool learning centres, duplications of what one major investigator aptly is called the "optimal learning environment": the child in his own home within the content of a warm and nurturant emotional relationship with his mother or a reasonable facsimile thereof, under conditions of varied sensory and cognitive input (Caldwell, 1967).

The long term effectiveness of such centres, as well as of the home-based programme mentioned earlier, was often found to be social rather than cognitive when followed results, sometimes made equivocal by research termination (e.g., Karnes et al., 1970; Palmer, 1969), were available. As the need to intervene directly with parents became more evident, the formation of parent education groups rose to prominence as an intervention method, but their impact on the low income population was disappointing (Chilman, 1973).

Curiously, an intervention programme which appeared to have great impact and was impressively documented as having lasting effects into the adult years, originated in the

1930's in an institution for the retarded. The "parents" in this programme (retarded, adult females) were given little training or direction, yet provided for the children ample conative, verbal, and cognitive stimulation (Skeels, 1966). This seemed a broad hint to the Verbal Interaction Project not only to operationalize through the Mother-Child Home Programme the theoretical propositions elaborated above, but to introduce the programme into the family with the least disruption possible to child and family. A careful attempt was made to work out a delicate balance in the programme between building sufficient structure to turn theory into concrete programme reality, while preserving to a maximum degree the autonomy of the mother and the intactness of the family's interpersonal relationships. The general aim of the ur-education to be fostered by the programme could be summarized by a paragraph from Bronfenbrenner's recent review of early childhood education research:

In the early years of life, the psychological development of the child is enhanced through his involvement in progressively more complex, enduring patterns of reciprocal, contingent interaction with persons with whom he has established a mutual and enduring attachment (Bronfenbrenner, 1974).

The Programme

The Mother-Child Home Programme (MCHP) was created and researched by the Verbal Interaction Project (VIP), starting with a pilot study in 1965, (Levenstein and Sunley, 1968). The programme had developed by 1968 into its current form after its first full year of operation in 1967 to 1968 (Levenstein, 1970). Its goals are cognitive and affective. They are aimed at supporting the mother (and through her, the family) in fostering the intellectual and socioemotional development of her child. The following general conditions were met by the programme as a means of actualizing its theoretical base. It:

1. was conducted in the home,
2. addressed the mother-child dyad as an interacting, mutually supportive social system,
3. began when the child was 2 years of age and continued to age 4 years,
4. actively involved the mother without teaching, counselling, or subtly coercing her,
5. assigned permanent toys and books as self-motivating, stable curriculum materials as the focus of verbal interaction techniques,
6. employed these toys and books to demonstrate to the mother a simple, structured, yet flexible curriculum of verbal interaction techniques,
7. provided non-didactic home interveners to model the curriculum techniques and use of the curriculum materials.

Extrapolating the social implications of the theory, the VIP anticipated feasibility for implementation outside of the research project by keeping the programme simple and eliminating requirements of formal education, previous special skill, or particular charisma for the home visitors.

The method has been described in detail (Levenstein, in press; Levenstein and Levenstein, 1971; Levenstein, 1973; and in a repetitive, cumulative curriculum called "The Toy Demonstrator's VISIT Handbook," Levenstein, 1970-1974). Briefly, the MCHP consisted of 92 semi-weekly, half-hour Home Sessions spread over 2 years, by interveners called "Toy Demonstrators." The latter were trained in non-didactic techniques to show a mother, by participating in play sessions with her and her child together, how to interact verbally to enhance the child's conceptual and socioemotional development. Commercially available toys and books were

used as the curriculum materials permanently assigned to the child. The Toy Demonstrator, after involving the mother early in the Home Session, gradually faced into the background and the mother was free to adopt the modelled behaviour, or not, as she wished.

The 46 Home Session during each year roughly followed the local school calendar for a total of about 7 months from October to May. Altogether the programme required about 23 clock hours of the dyad's time with a Toy Demonstrator each year, aside from the time mothers might spend outside of sessions playing and reading with their children each day (suggested but not stressed to the mothers). The cost of thus giving low income mothers the materials and access to the techniques of the "hidden cognitive curriculum" of some middle income families, was estimated at about \$400 a year for each child. The cost could be kept relatively low because it included the free manpower of the mothers acting as their children's main teachers and the free working space contributed by the participating families.

The Toy Demonstrators were paid former mother-participants of high-school education and unpaid woman volunteers, usually college educated. They were trained together in an initial training workshop and in weekly group supervisory conferences throughout the programme year. Twelve books and eleven toys, selected on 26 explicit criteria by VIP staff, were given to the mother for the child each year in a planned weekly sequence of increasingly complex curriculum materials. The Toy Demonstrator modelled verbal interaction techniques and interpersonal behaviour functional to learning, utilizing the toys and books (called Verbal Interaction Stimulus Materials, or "VISM") as the structured cognitive curriculum with a different guide sheet for each VISM. The "curriculum" actually consisted of a list of concepts and behaviours which remained the same on every guide sheet but were illustrated and elaborated differently by each

toy or book which formed the content of each new guide sheet. The chief lesson conveyed to the Toy Demonstrator in supervision was that the programme was aimed more at the mother than at the child. The main and enduring responsibility for the child's education at this age must be the mother's, not the Toy Demonstrator's. Therefore, ability to eliminate herself early as an active participant from Home Sessions was her best sign of success.

Research Data: The Message from Home

Since 1968, each September a new group of children was pretested by the Verbal Interaction Project (Cattell, Binet, Peabody Picture Vocabulary Test) and enrolled in the full, 2-year MCHP, to be post-tested 2 years later after completion of the programme. By June of 1973 the 93 mothers and children mentioned earlier had participated in the MCHP in four successive yearly cohorts (1968, 1969, 1970, 1971). All were of low income with the usual cluster of demographic attributes characteristic of this socio-economic status and with the cohorts ranging in ethnic composition from 70% to 100% Black.

The research of the programme's cognitive and socioemotional effects included the goals indispensable to intervention evaluations: test of internal validity ("Does it work in the research project?") and of external validity or generalization ("Will it work in other settings?").

The measures used to answer these questions were standardized and project-developed tests of the cognitive and affective development of treated and untreated children.

The research went beyond these goals, however. It was concerned with the *feasibility* (including quality control) of the programme in other settings and with other low income populations than those of the project. It was concerned, too, with the *desirability* of the programme, not only in terms of its

attractiveness to the target low income population, but in relation to the values of a democratic society. Since the issues of feasibility and desirability are of pivotal importance to the social usefulness of an intervention programme no matter what the significance of the basic research findings, the VIP attempted to carry a triple burden from the beginning. The programme had to be developed for acceptability to the target population and to society, for the possibility of broad and perhaps national implementation, and the research data had to warrant dissemination.

The results for the four cohorts of children entering the 2-year Mother-Child Home Programme from 1968 to 1971 indicate that the programme did indeed seem to work. The children showed significant IQ gains and above norm IQ's by the end of the 2 years (Table 8.1).

These short term results remained stable for the two cohorts (1968 and 1969) which had entered kindergarten and first grade at the time of the fourth annual follow-up study conducted from November 1972 to March 1973. The mean IQ was 105.4 for the group in which the majority had reached first grade, and at 113.3 for the group in which most were in kindergarten. On the other hand, a group of first grade children (Group C_s), recruited in 1972 for participation as an "after only" untreated group with no previous contact with the VIP but matched to the 1968 treated cohort (Group T₁) on the same low income criteria met by the treated groups, demonstrated a much lower IQ mean of 91. (The low income criteria were eligibility for low income housing, residence in rented housing, parents not above the 12th grade education or semi-skilled occupation.)

Moreover, when the two matched groups were compared with each other, the treated T₁ group was found to be significantly superior to the untreated C_s group, not only in general IQ but also in other cognitive areas: verbal IQ, reading achievement, and arithmetic achievement (Table 8.2).

Table 8.1. Comparisons of treated and control groups, by IQ 1968-1973

Entry year	Group and programme	Pretest	Number of months after pretest					Control group
			8	20	28	40	52	
1968	T ₁ N = 21	IQ 90.4	101.8 ^a	109.0 ^a	108.3 ^a	107.3 ^a	105.4 ^a	
		SD 9.1	9.0	8.5	11.1	11.6	13.0	
1969	T ₆ N = 23	IQ 88.8	105.6 ^a	108.2 ^a		113.3 ^a		
		SD 13.8	16.5	15.6		15.9		
1970	T ₈ N = 23	IQ 90.0	106.4 ^a	106.9 ^a				
		SD 9.6	15.1	13.1				
1971	T ₉ N = 26	IQ 91.6	105.8 ^a	108.1 ^a				
		SD 13.0	9.8	9.4				
1972	C ₅ N = 30	IQ						91.0
		SD						11.5

^ap is less than 0.01.

The two groups also differed significantly in socioemotional coping skills (on an instrument developed by the Verbal Interaction Project), as rated by their classroom teachers, who were unaware of the treated or untreated status of the children. The instrument was the "Child Behaviour Traits," a 20-item, criterion-based, Likert-type scale yielding a summative score ranging from 20 to 100, with a score of 60 indicating generally "moderate" presence of coping skills. The treated T₁ group scored significantly higher than the untreated C₅ group on the CBT. (The split-half reliability coefficient for the CBT was 0.97, indicating the very high internal consistency of the instrument. It is current being tested for inter-rater reliability and for validity.)

These findings must be viewed with some reserve, since they were based on a quasi-experimental research design (Campbell and Stanley, 1963), with subjects not randomly selected, but recruited from the populations of two low

Table 8.2. Comparison of matched two-year treated (T_1 and untreated (C_s) groups on cognitive and socioemotional measures at follow-up 1972-1973.

Measures	T_1 Group 1968			C_s Group 1972			Difference of means		
	2-year treated			tested "after only"			t		
	N	Mean	SD	N	Mean	SD	Score	value	p<
Stanford-Binet and WISC: general IQ	21	105.4	13.0	30	91.0	11.5	14.4	4.18	0.01
Peabody picture vocabulary test: verbal IQ	21	97.6	13.6	30	89.7	11.6	7.9	2.22	0.05
Reading standard score, ^a wide range achievement test	15 ^b	103.9	7.7	30	95.0	12.9	8.9	2.45	0.02
Arithmetic standard score, ^a wide range achievement test	15 ^b	106.0	13.3	30	95.0	13.9	11.0	2.55	0.02
Child's behaviour traits, raw score: socioemotional coping skills	21	77.2	16.7	30	66.1	15.9	11.1	2.41	0.02

^aAs calculated in Schaie and Roberts, 1970.

^bSix Ss were too young for the age-based standard scores.

income housing projects and from referrals by local social agencies (e.g., social workers of Headstart programmes and public health nurses). All families had to meet low income criteria and the acceptance rate of eligible families was high, at least 80% each year. The fact remains that without random assignment of individuals to treated and untreated groups, the conditions of a true experiment were missing and thus it cannot be said with a high degree of confidence that the differences between groups were due only to treatment effects. In view of the possible import of the findings, this caveat must be taken seriously and not as a standard academic disclaimer. The basic requirement of random assignment of subjects to different conditions is now being met for 50 children (25 treated and 25 untreated) in the 1973 to 1974 cohort, and it

remains to be seen whether similar outcome differences within and between treated and untreated groups will be found.

Replication Outside of the Verbal Interaction Project

To study the generalizability of the method's effectiveness, the Mother-Child Home Programme is now being tested outside of the research project in ten states of the country, from Alaska to Maine. The research project's Demonstration Centre has been guiding its replication at 30 locations in a variety of organizational settings, such as schools, family service agencies, churches, mental health clinics, and American Indian reservations. The replications provide feedback of demographic data on their samples and of before-after IQ's to measure the replications' effectiveness and thus answer the question of the external validity of the model programme's effectiveness. At the same time, the replications provide a practical test for the feasibility of applying the programme in settings with fewer resources than the research project. For example, a replication is not likely to be staffed by personnel with the specialized skills and long programme experience of the research project's team.

IQ data have been analyzed from the first eight replicators (1970 to 1972). Their combined pre-post IQ differences after 1 and 2 years were similar to those of the model programme's sample, using the same measures (Cattell and Stanford-Binet): about 15 IQ points for combined replication results after 2 years, and about 17 points for children in the model programme during the same year. Again a word of caution is in order. The range of IQ differences among the replications was wide, immediately suggesting that the programme had varying effects on different target populations among the poor. But important factors obscured the reliability of these test results. The *N*'s in most of the replications were very small, and the comparability, in terms of skill and experience of the psychologists who examined the children came into question

when actual protocols were scrutinized with some attention. It became clear that it was difficult to know which of three replication variables was influencing the results: small N 's, uneven tester performance, or actual differences in programme effectiveness. To remedy the first two factors, replications have enrolled larger numbers of subjects this year and the testing procedures for seven of the replications are being closely monitored for reliability by an outside testing agency, the Educational Testing Service of Princeton, New Jersey. By July, 1976, the replication results would lend themselves to clearer interpretation.

However, the labour of the project's Demonstration Centre in this pilot dissemination experience has already yielded a great deal of valuable information about the feasibility and the desirability of the programmes broad implementation. There are advantages and disadvantages. One of the disadvantages is that organizations are often prevented by lack of money from adopting the programme for large enough numbers of children to demonstrate programme effects reliably. Even when they do, the maintenance of model programme standards, though effective in almost all replications, requires hard work.

Clear advantages lie in the areas of desirability and feasibility. In terms of desirability, the programme appears to be as attractive to dyads reached by replications as it is to the project sample. It is received enthusiastically both by the dyads and by the sponsoring organizations. Also, the individualized dissemination techniques developed by the Demonstration Centre (Levenstein, Kochman and Roth, 1973) appear to preserve the low key, low pressure nature of the intervention as well in replication as in the model MCHP, so as to interfere minimally with family privacy, style, and autonomy. This approach is not only necessary for effectiveness, but is also congruent with a democratic society's respect for human values and human beings. Milgram's (1974) sobering studies at Yale on obedience to authority underscore the social

risks of gaining mothers' cooperation too easily with a programme which can destroy the privacy of their homes. They also vividly illustrate the covert sabotage which can occur when mothers give surface obedience to accepting a programme they do not really like. Against these dangers, the Mother-Child Home Programme has incorporated explicit safeguards which seem to work in replication as well as in the model programme.

The programme is also feasible. Although difficult, it does seem possible, at a financial cost similar to the model programme's, to maintain programme quality control through firm guidelines and personal training and monitoring of replication coordinators. The programme's techniques, curriculum, and materials appear to be transmittable and they are used effectively by a wide variety of personnel throughout the country trained as Toy Demonstrators, under the direction of coordinators trained at the VIP Demonstration Centre. A large number of well established organizations, with demonstrated capacity to provide programme stability, are enthusiastic about the programme and are willing to support it. Many more have indicated they would do so if they had minimal financial supplementation from government or other sources. In short, the dissemination of this family enhancing programme appears to be socially feasible.

Some questions remain to be answered. Will future out-of-project replications return more reliable demonstrations of programme effectiveness? Will the 1968 to 1971 graduates continue to show long range effects? Will the outcome data repeat the findings for these four cohorts when collected from new groups within a true experimental design? Yet, the data even at this time may warrant consideration of the programme's applicability to other populations vulnerable to educational disadvantage, such as the mildly retarded.

A re-phrasing of the "message from home" appears to be that a surprisingly small amount of intervention geared

specifically to tapping the mighty resources of the mother-child interactional system within the family has had relatively strong and long-lasting effects for children with normal capabilities. Perhaps the same can be true for many mentally retarded children as well.

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EPIDEMIOLOGY & EVALUATION OF SERVICES FOR THE MENTALLY HANDICAPPED

As part of the British National Health Service, the Wessex Regional Hospital Board was created in 1958 to provide and administer hospital services for a geographic region in the south of England with a population of about two million. The responsibilities of the Board included provision of hospital care for the mentally handicapped, when considered appropriate, by the agency personnel from health and social services. It is, of course, in general the most severely mentally handicapped who live in continuous hospital care. Of those mentally handicapped persons who do not, many live in private households, some in privately run institutions, and (at the present, although not in 1958) an increasing number in hostels provided by the country authorities.

The Board was faced with the problems of overcrowding in their institutions for the mentally handicapped and a growing waiting list for institutional placement. Professor Jack Tizard, when approached for advice on the number and type of places needed, advised the Board to undertake a prevalence survey of mental handicap in the Region as the data available were insufficient for the purpose of planning further provisions.

The author joined the Wessex Hospital Board in 1963 in order to undertake the survey.

Data for the survey are supplied by hospitals within and outside the Region, as well as by local authority social service, health, and education departments in the Region. These authorities, in addition to authorizing the special collection of data for the team, also allow the team members access to facilities for the collection of additional data based on direct observation.

The following questions guided the kinds of data collected in the Wessex survey and the kinds of analyses undertaken.

1. What is the size of the target population for which services are being made available? For example, how many people at any time, and in a population of given size and demographic characteristics, have the "problem," for example, mental handicap?

2. What is the nature of the "problem"?

- (a) What are the types and ranges of disability (incapacity to do things normally expected) among the people identified? For example, inability to walk at all even with help, inability to walk alone but able with help, inability to feed oneself at all, inability to talk in sentences.

- (b) What are the types and ranges of inappropriate behaviours (difficult, disruptive, or potentially dangerous behaviours) among the people identified? For example, overactivity, physically aggressive behaviour, behaviour destructive of furniture, fittings, clothing, etc., attention seeking, self-injuring behaviour (Kushlick, Blunden and Cox, 1973).

- (c) What are the associated clinical conditions found

among people identified? For example, epilepsy, spasticity, congenital abnormality (mongolism, hydrocephalus, heart, or other abnormalities). Estimates are made of the proportions of identified people with different degrees of handicap, inappropriate behaviour or associated clinical conditions. (Kushlick and Cox, 1973).

3. How are the people identified being cared for? What are the characteristics of people to whom the services are being delivered? How do these people differ from those not receiving services?

- (a) How many are living with their own families, and how many are in hospitals, in local authority homes, or private homes, etc.?
- (b) How many are receiving defined specialist services believed to be appropriate? For example, education, occupational therapy, or physiotherapy?

The data from the survey for answering some of the questions are contained in Tables 9.1 and 9.2. They show the number of children and adults who were recognized as mentally handicapped by health and social service agencies in the Wessex Region on July 1, 1963 (Kushlick, 1973) and are the crude rates in a total standard population of 100,000. The low rates of "mildly handicapped" children are accounted for by the fact that most of such children are dealt with by the Education Authorities and are not included in the survey data.

Of the 48 children known to health and social services and who are severely subnormal, two-thirds are living at home. Of the 130 adults, only about one-third are living at home (Table 9.1).

It can be seen that the majority of children who are non-ambulant with severe behaviour problems of severely incontinent, and all severely subnormal adults with these

handicaps, are in institutional care. However, it can also be seen that there is almost one child with these severe disabilities living at home for every one in a hospital. In addition, the proportion of those handicapped who are continent, ambulant, and without severe behaviour disorders in institutions is considerable, and this is particularly marked among the adults.

Table 9.1. Wessex survey: Grade, social or physical incapacity, place of care and education of mentally handicapped persons known to health or social services (rates per 100,000 total population)

Age group	Grade	Place of care	In capacity category				
			NA	All SB	SI	CAN	Total ^a
Children under 16	SSN ^b	Home	4 ^c	4	2	20	30
	(IQ<50)	Institution	5	5	3	4	18
	MSN	Home	1	1	1	7	9
	(IQ>50)	Institution	0	1	0	1	2
Adults 16 and over	SSN	Home	2	2	1	45	50
	(IQ<50)	Institution	6	14	6	53	80
	MSN	Home	1	0	0	69	75
	(IQ>50)	Institution	2	4	1	45	53

^aWhere figures do not add exactly to the row totals this is due 1) to rounding to the nearest whole number and 2) to inclusion of a few persons for whom incapacity ratings could not be obtained.

^bSSN, severely subnormal (IQ < 50); MSN, mildly subnormal (IQ > 50); NA, non-ambulant (unable to walk); All SB, all severely behaviour disordered (able to walk but presenting seriously disruptive behaviour); SI, severely incontinent (not in the NA or All SB categories but severely incontinent); CAN, continent, ambulant, and with no severe behaviour disorders.

^cThe figures shown here are the known or 'administrative' prevalence. The 'true' prevalence, especially of mild subnormality, is much greater, but the majority of mildly subnormal persons make no contact with health or social services.

A standard total population of 100,000 had only 20 mentally handicapped children in institutions, 18 severely subnormal and 2 mildly subnormal. Of the 20 children in institutions, 14 or 70% were incontinent, non-ambulant, or had severe behaviour problems. Of the 30 severely subnormal

children at home, 10 had similar problems. For the same overall population there are 133 mentally handicapped adults in institutions. Of these, 33 or 25% were incontinent, non-ambulant, or had severe behaviour problems. Clearly there is a higher proportion of adults than children in institutional care with "problems" other than being unable to walk, behaviour disturbance, and severe incontinence. Further, there is a higher proportion of adults than children in institutional care who are mildly subnormal (40% compared to 10%).

Table 9.2 shows level of functioning by clinical diagnosis of Wessex adolescents between 15 and 19 years, the age group at which our ascertainment is known to be most complete (Kushlick and Cox, 1973). There appears to be little or no relationship between level of functioning and medical diagnosis.

The only significant associations are a higher proportion of non-ambulant (NA) people among those with conditions nearly always associated with mental handicap (MD) or with cerebral palsy (CP) and of severe behaviour disorders (all SB) among the ambulant people with epilepsy.

An earlier study of Tizard (1960) had demonstrated that a small residential unit for moderately retarded children who were ambulant and had no severe behaviour disorders, that was organized separately from the traditional hospital, on principles of "nursery education," provided an alternative pattern of care from the more traditional mental retardation hospital. At the end of the study children in the small residence had made significantly higher increments of verbal IQ scores than a control group of children who had remained in the mental retardation hospital. No differences were observed in the performance IQ scores of the two groups. Both sets of children had originally been in the mental retardation hospital and the study determined, on a random basis, those who remained in the hospital or moved to the small residence.

Table 9.2. Severely subnormal persons aged 15-19 years, Wessex including all Wiltshire, 1963; social and physical incapacities in persons of different diagnostic groups

Diagnostic group ^a	Number of cases	Cases with incapacity rating = (100%)	In capacity category %			
			NA ^b	ALL SB	SI	CAN
Down's Syndrome	167	163	2.5	6.1	0.6	90.8
Conditions almost always associated with mental handicap ^c	32	32	28.1	9.4	9.4	53.1
Cerebral Palsy	61	61	37.7	6.6	9.8	45.9
Major congenital abnormalities	37	37	8.1	16.2	8.1	67.6
Epilepsy	74	73	2.7	32.9	15.1	49.3
No clinical evidence of brain damage	220	213	2.3	14.6	5.2	77.9
Not known	17	17	5.9	11.8	0	82.3
All diagnoses	608	596	7.9	13.4	5.9	72.8

^aThe clinical conditions are mutually exclusive and have been derived in serial order from above down. E.g., the people categorized "Epilepsy" have *not* associated major congenital abnormalities or cerebral palsy, etc. Similarly, people categorized 'Cerebral Palsy' may have associated major congenital abnormalities or epilepsy.

^bN.A., non-ambulant (unable to walk); ALL SB, all severely behaviour disordered (able to walk but presenting seriously disruptive behaviours); SI, severely incontinent; CAN, continent ambulant, and with no severe behaviour disorders.

^cExamples: phenylketonuria, lipoidoses, microcephaly, hydrocephaly, craniostenosis.

Further studies of different forms of residential care were conducted by King, Raynes, and Tizard (1971). These studies developed objective criteria for measuring certain staff practices within residential settings. The measures discriminated between units which were recognized intuitively as "good" or "bad."

The results of these studies, together with the Wessex Survey, were used to make a series of recommendations to the Wessex Hospital Board Administrators for the planning of new residential facilities for the mentally handicapped.

Evidence from the research suggested that there would be major advantages if people in hospitals or residential care were grouped in relation to the area in which their families lived rather than by their incapacity level or by the clinical condition from which they were suffering. The advantages of geographical grouping, both in small residential units and within existing hospitals, appear to be:

1. The spreading out of the most dependent and disruptive residents among those more able who could also contribute to their care.
2. Bridging the traditional gap at operational level between home and institutional care. Parents from any area would know which unit serves their particular area and the living unit staff might get to know the families with the clients still at home in their areas.
3. Bridging the gap between hospital and local authority and general practitioner services. General practitioners, pediatricians, social workers, teachers, home nurses, and health visitors from an area might know the unit and the staff serving that particular area.
4. Representatives of local government and parents' societies might also be able to identify with one or two residential units or hospital wards, and take a special interest in achieving, maintaining, and improving standards on that unit. Thus, not only would there be more effective demands for higher standards of care in the residential settings, but it would be easier to deliver those resources that were available to the residential settings and to coordinate them.

The team suggested using geographic catchment areas for planning, and that new facilities for all mentally handicapped children requiring residential care be set up in each catchment area. From the prevalence study it was estimated that the residential needs for the mentally handicapped children in each catchment area of 100,000 would be met by 25 places, including 4 to 5 for short term care and an additional 130 places for mentally handicapped adults.

It was recommended that the new residential units be domestic in character. The term "domestic" is used here to emphasize a move away from what are commonly regarded as "institutional" characteristics in existing hospitals, towards those in "ordinary" households. The features of "domestic" or "institutional-type" units include their size (number of residents), physical design, furnishing and fittings, as well as the way in which they are organized and in which staff and residents relate with one another. While the new units are still considerably larger than "ordinary" family houses (20 to 25) residents with, at any time, about 5 members of caring staff) they should be smaller than many existing hospital wards which contain about 40 children and 8 staff. The residents should sleep in bedrooms for 1 to 5 people as opposed to dormitories for around 20. They should have a separate dining room, lounge, and playrooms, as opposed to a large single, "day room" which doubles as a dining room. The units should prepare their own food in their kitchen rather than receiving food, prepared in a central kitchen, in trolleys. They should have ordinary bathrooms which contain a single bath, washbasin, and toilet, rather than an "ablution-block" with up to 20 toilet bowls and basins in a row. The furnishings and fittings should be those found in homes: wooden beds, cupboards, carpets, instead of iron bedsteads, lockers, and linoleum-covered floors. The staff should not wear uniforms, they should sit down with the residents at meal times and eat with them, and some staff should live within the units, albeit in separate flats or bed-sitters. The staff of "domestic type"

units should be recruited for that unit only; that is, they cannot be transferred as in existing hospitals from one ward to another when needs arise in other wards. The new units should be locally based; that is, they are sited in residential areas within the locality from which they receive their residents.

To meet the immediate problems of overcrowded institutions and waiting lists for institutional placements, it was recommended that two small residential units be established with 25 children in each unit. Each unit was to be placed in, and to serve, an area of approximately 100,000 population. A similar area of the same size, served by the traditional mental retardation hospitals would serve as a control in an experiment to evaluate and compare the two patterns of care.

The recommendations were accepted and the author was involved in the establishment of the two small residential units and in their evaluation. Since the recommendations were made and based on initial experience with the two small residential units for children, three additional residential units for children and one for adults have been established. It is already clear that locally based residential units serving catchment areas of 100,000 total population can effectively care for the most severely mentally handicapped children and adults within the catchment area.

The following are some of our findings since these small locally based residential units have been established:

1. It has (in spite of earlier doubts) proved possible to find sites for both childrens and adults units with little difficulty or neighbourhood opposition.
2. The new units have recruited staff for all positions, although existing traditional units are still unable to fill all positions.

3. (a) The numbers and behavioural characteristics of children and adults in each locality who were identified from the system and admitted to the new units are very close to those predicted from the prevalence data. (b) Very few parents with a child in existing units declined the offer of a place for their child in the new local units. (c) Only one geographically eligible child in an existing unit was not transferred to the appropriate new unit. Her behavioural characteristics were very much more capable than most of the children admitted, but it was considered unwise to admit her to a unit with no qualified nursing staff because she has bouts of status epilepticus. (d) Since the admission of children and adults to the new units, only one individual from each unit has been removed from the unit and transferred to the existing large hospitals. These residents have been regarded as too aggressive or disruptive for the local unit. Their disruptive behaviours continue in the existing units. (e) The demand for residential care in the areas serving the new units has not increased, despite the fact that no additional services have been provided in the intervening period to serve families in these areas with a handicapped person at home. Such clients are given day care at the new units when transport is available.
4. The general medical care of the residents of the small units has been managed by the local General Practitioner. When specialized acute medical or surgical care has been needed, this has been obtained from the local District General Hospital specialists.
5. The local pediatrician, social workers, and special educators all form part of the multidisciplinary team following the progress of clients in the units. (The consultant charge of one children's unit is a pediatrician. In the other units, the consultant in charge is the

psychiatrist specialized in mental handicap from the existing hospital for the mentally handicapped.)

6. Those children and adults who live at home and who are acceptable to the local day schools or training centres for children or adults attend these daily. This affects just over half of the residents. Those not accepted by the local education and training facilities are very physically handicapped or are regarded as too disruptive. Most are incontinent more than once a week, during the day.

Home teachers visit the children's units daily to undertake teaching programmes and a physiotherapist visits for 2 to 3 sessions weekly.

7. The costs of these units have been described in detail elsewhere (1). Briefly: (a) these units use up less land per resident than traditional units. (b) The running costs are related to the staffing ratios. Thus, when traditional hospital costs are adjusted to allow for the fact that their staffing ratios are lower, there are no differences in running costs per week between new units and traditional units in our region. (c) The running costs of these new units are lower than average running costs for existing units in the Oxford Region of England, where a new large traditional hospital has recently been built.

The approach to evaluation consisted of attempting to measure the different degrees of "effectiveness" of different methods of care.

In order to measure effectiveness, it has been necessary to define the aims of care in a way that makes it possible to measure (that is, to quantify) whether and to what extent they are being met.

Any measures of effectiveness must be reliable (replicable),

valid (measure what they claim to measure), and agreed upon and seen to be relevant by the people planning, administering or running the service at all levels.

The criteria of effectiveness used by the research team were incorporated in operational policy documents and statements of administrative aims with respect to all hospital services for the mentally handicapped in the Wessex Region.

Work continues on refining these measures of effectiveness which have been divided into two main areas:

1. (a) Measures of change, over time, in the behaviour (appropriate and inappropriate) of the handicapped person.
- (b) Measures of change, over time, in the "problems" and experiences which the family of the handicapped person encounter while caring for the handicapped person, and especially in relation to contacts with the residential services for the mentally handicapped.

The assumptions are that the "better" the service, the greater will be the "progress" made by the handicapped people, and the lower will be the level of difficulties experienced by their families.

2. Measures of the "quality of care" received by the handicapped person and the families. The "quality of care" has been operationally defined to include the following: the daily routine of the residential units for the handicapped. the sequencing of staff and patient activities for the whole of the waking day (including weekdays and weekends) is observed and systematically recorded. This allows the collection of standardized data including: (a) Number of staff assigned to a living unit as well as those on duty at any time. (b) The time spent by the residents in groups of different sizes throughout the day. (c) The time spent by the residents in different activities in which they might acquire or lose important social skills (for example, in getting out of bed, toileting, dressing,

eating, formal training, and recreation). (d) The proportions of residents with personalized possessions and living space. (e) The extent to which the staff sequencing of activities is influenced by the individual differences among the residents at any time, or whether these routines affecting all residents are modified at different times of the week (weekends) or at different seasons of the year.

Results

Quality of Care

Preliminary findings are discussed elsewhere (Kushlick, 1973; Durward and Whatmore, 1975; Whatmore, Durward, and Kushlick, 1975).

The original aims of the new units were to avoid the undesirable features and practices described by King, Raynes and Tizard, (1961), namely, "depersonalization," "social distance," "rigidity," and "block treatment." These aims have been achieved in the units by providing adequate staff-resident ratios, and facilities for acquiring, storing, maintaining, laundering, and distributing personal clothes and effects, and by providing high quality catering standards. (Costs per head of food are the same as for existing hospitals, costs per head on clothes are *lower* than in existing units.) Clothes are now often provided by parents who can be reasonably sure that clothes will not be lost or destroyed in existing hospital laundries. In the units in the hospitals for the mentlly handicapped the same aims have so far not been achieved.

Further measures of quality of care have been developed by the team (Durward and Whatmore, 1975); Whatmore, Durward, and Kushlick, 1975). Another most interesting measure has been developed by Professor Todd Risley's Living Environments Group of the Department of Human Development, University of Kansas (Risley, 1974). In these measures we study, by a time-sampling procedure, the

behaviour of the children, classifying it into Appropriate, Neutral, Inappropriate and Disruptive, and also the behaviour of the staff, noting when they contact children and the child behaviour with which this contact is associated. Initial results using this procedure show that children in the local experiment units display a higher proportion of "appropriate" behaviour at nearly all times of day than their counterparts in the traditional hospitals. The results also show that staff contact the children more in the experimental units, and particularly that "appropriate" child behaviour is more likely to be followed by staff contact in the experimental units than in the control units. The main exception noted was that a small group of children (the partly mobile) seemed to be better cared for in a traditional unit, but this was only noted for certain times of day, recreation periods and mealtimes.

A comparison of the "progress" of children living in the first small, locally based unit and equivalent children living in hospital was made by means of a Child Development Interview Schedule administered at baseline (T1) and again after 4 years (T3). The interview schedule has 13 sections, each dealing with a particular type of behaviour (for example, mobility, washing, etc.). The questions in two of the sections enable a subdivision of General Behaviour and Emotional Response into "appropriate" and "inappropriate" sections. The questions in the interview were devised after 24-hour observations had been made on groups of severely mentally handicapped children and an analysis of behaviour scales already successfully used, such as Vineland (Doll, 1953), and that of Griffiths (1954).

Table 9.3(a) lists the 13 behavioural areas of the CD schedule, together with the mean raw scores at T1 and T3 of the two groups of children. Results (Smith et al., 1973) show that, as measured by the changes in mean raw scores, the group of children receiving residential care in the locally based unit made more "progress" than those in the hospital unit in

Table 9.3(a). A comparison of the changes in raw scores over 4 years on the CD schedule of two groups of SSN children receiving different types of residential care.

Section of CD schedule (and maximum possible score)	Mean raw score			
		T1	T3	Difference
Mobility (11)	E ^a	7.06	7.20	0.25
	C	7.45	7.20	-0.25
Speech (24)	E	9.89	11.89	2.00
	C	11.00	10.55	-0.45
Eating (a) (22)	E	11.61	16.22	4.61
	C	13.15	14.00	0.85
Eating (b) (21)	E	14.44	16.33	1.89
	C	15.30	16.95	1.65
Washing (17)	E	3.44	5.38	1.94
	C	3.00	4.10	1.10
Dressing (27)	E	9.28	14.34	5.06
	C	10.90	12.20	1.30
Toilet (20)	E	8.16	12.22	4.06
	C	6.90	9.90	3.00
Habits (24)	E	18.94	19.16	0.22
	C	20.40	20.70	0.30
Sleep (14)	E	10.56	10.89	0.33
	C	10.20	11.20	1.00
Appropriate general Behaviour (25)	E	8.17	10.11	1.94
	C	11.80	10.00	-1.80
Inappropriate general Behaviour (16)	E	11.50	11.50	0
	C	10.25	12.00	1.75
Appropriate emotional Response (24)	E	15.50	16.22	0.72
	C	15.85	16.25	0.40
Inappropriate emotional Response (19)	E	13.94	14.83	0.89
	C	13.70	15.30	1.60

*E, children in locally based residential units ($N = 18$); C, children in large mental handicap hospitals, ($N = 20$).

9 out of the 13 behavioural areas. In 3 of these, eating (a), dressing and appropriate general behaviour, the differences in the change in scores of the two groups between T1 and T3 reached statistical significance.

In the section eating (a), all the 18 children in the locally based unit gained in score over the 4 year period, whereas of the children in hospital, 11 showed a gain in score, 8 showed a loss, and 1 child remained at exactly the same score.

In the section on dressing, 17 of the children in the locally based unit showed a gain in score and 1 scored the same at T1 and T3. Of the children in hospital, 11 showed a gain, 8 showed a drop in score, and 1 remained at the same score.

In the section on appropriate general behaviour, 11 of the children in the locally based unit showed a gain in score, 5 showed a drop in score, and 2 remained at the same score. Of the children in hospital, 7 showed a gain in score, 10 showed a deficit, and 3 scored the same at T1 and T3.

In the section eating (a) the scores are derived from questions about how the child eats his food, what type of food he eats, and whether he makes a mess. (Eating (b) includes questions on the child's table manners.)

In the section on dressing, scores are derived from questions on the child's dressing and undressing skills, whether he fastens buttons, puts on socks, ties laces, etc.

The section on appropriate general behaviour includes questions on the child's level of activity, whether he does small jobs, goes on errands, plays with toys, looks at picture books, etc.

Table 3(b) compares the two groups on whether the change in score for each child in each section was positive or negative. This tabulation of changes reveals that overall the children living in the locally based unit made 154 gains (66%).

out of a possible 234 (18 children \times 13 sections) against an overall improvement for the children living in hospital of 133 (51%) out of a possible 260 (20 children \times 13 sections). The differences between the gains and losses of the two groups reached statistical significance.

Among children in the locally based unit those who showed most gains in behaviour over their counterparts in hospital were those with the most severe handicaps, that is, children who remained non-ambulant throughout the 4 years of the study.

These data relate only to the first locally based unit and its control group, hence the numbers are small. More data will be added when the other locally based units have been open 4 years.

At present, no special educational programmes or good setting activities are being undertaken in the new units, although the environment would facilitate their implementation should the staff working there and their supervisors decide that these are desirable.

Despite the fact that they are the only ways of comparing changes in groups of people over long periods of time, measures derived from averaging scores accorded answers to questions on a wide range of specific aspects of the child's behaviour have severe limitations as criteria of effectiveness of different forms of care. The measures of child behaviour in different situations and activities throughout the day are very much more sensitive to subtle changes in behaviour which are relevant to other people living with the caring for them. They are also more sensitive to the physical and social environments in which the children live, appear very useful proxies for the "quality of care," and can be used by the direct care staff to monitor the effect of changes in routine. These measures are therefore being developed within the team and will be undertaken in all of the experimental and traditional units.

Table 9.3(b). Sections of CP which there was a statistically significant difference between the "progress" of experimental and control groups; a comparison of the two groups on overall gains and losses in scores on the interview schedule^a

	Gains ^b	Losses ^c	Same ^d	Total
E (N = 18)	154	62	18	234 ^e
C (N = 20)	133	94	33	260
Total	287	156	51	494

^a $\chi^2 = 11.07$ with 2 off; $P < 1\%$ (9.21).

^bGains = number of cases in which a child showed a gain in score between T_1 and T_2 on a section of the interview schedule.

^cLosses = number of cases in which a child showed a drop in score between T_1 and T_3 on a section of the interview schedule.

^dSame = number of cases in which a child scored the same at T_1 and T_3 .

^eThus the total for E represents the number of children in the group (18) multiplied by the number of sections on the interview schedule (13) = 234.

Other measures of comparative effectiveness include the extent to which family members are able to maintain contact with the handicapped person in residential care and their feelings about the care expressed in positive or negative comments on the care received. The preliminary results show that parents of children in the locally based units maintained contact (visited and took the children home) more frequently than those with children in traditional units. They also expressed positive comments more frequently and negative comments less frequently (Horner et al., 1973).

Future Plans for Services for the Mentally Handicapped

Based on the experience gained from the research in Wessex and from elsewhere, a plan has been drawn up for the structure of service facilities for the mentally handicapped in England and Wales (Department of Health and Social Security, 1971).

The unit for planning is a population of one million people. The present and future structures of services is shown on Figures 9.1 and 9.2. Figure 9.3 gives the key to the symbols used in the diagrams.

In Figures 9.1 and 9.2, the total population covered by the whole page is one million. The population covered by one of the four columns is a quarter of a million (250,000). Each column is divided into five rows or five areas each of total population 50,000.

The squares within, which extend over two areas of 50,000, represent the team of multi-disciplinary professionals shown in Figure 9.3. These are key professionals from different disciplines, already available outside the hospitals for the mentally handicapped, whose efforts might, if there were the will to do so, be collectively directed towards the needs of the mentally handicapped and their families.

The smaller squares represent residential facilities. The diamonds represent schools or training facilities. Those with double lines are for children (age under 16 years). Those with single lines are for adults. Symbols which are "shaded" represent facilities administered by local authorities; symbols without "shading" represent those administered by the hospital service.

The main features of the present service can be seen in Figure 9.1.

This shows a total population of one million served by two hospitals for the mentally handicapped. In other words, each hospital serves a total population of half a million people (two columns).

Each hospital has about 90 children (50 of whom attend school) in two wards, and about 550 adults in about 13 wards of 40 places each for SSN adults, and 3 of 50 places each for MSN adults. Of the adults, about 150 attend training centres

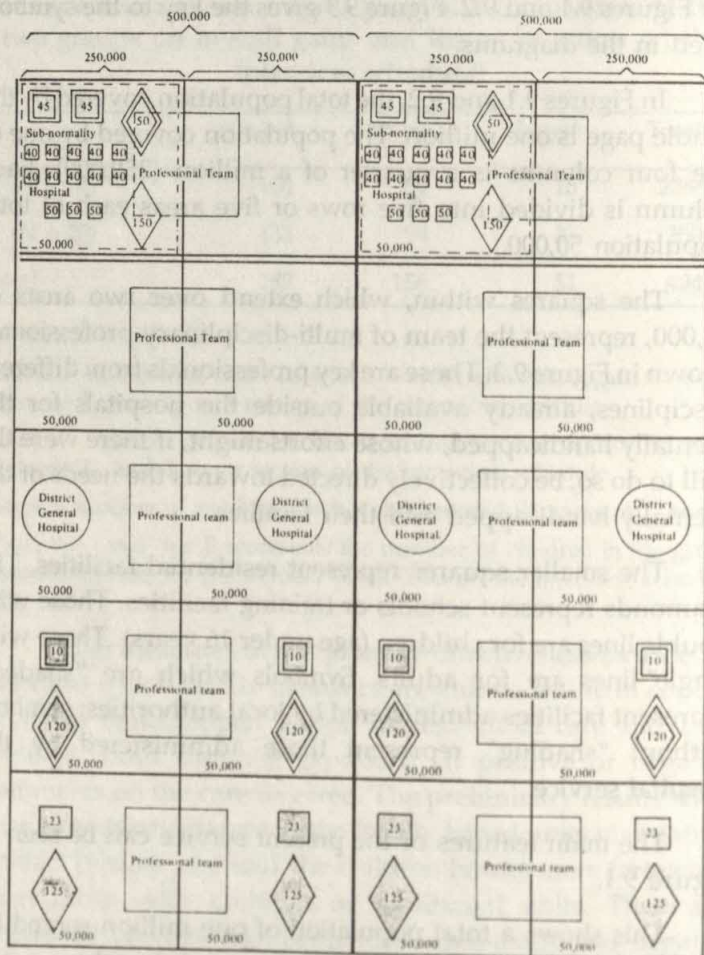


Figure 1. Existing services for mentally handicapped in a total population of 1,000,000. Key: □, residential facility for children; □, residential facility for adults; ♦, training facility for children; ♦, training facility for adults. Non-shaded areas represent hospital facilities, and shaded areas represent local authority services.

Fig. 1

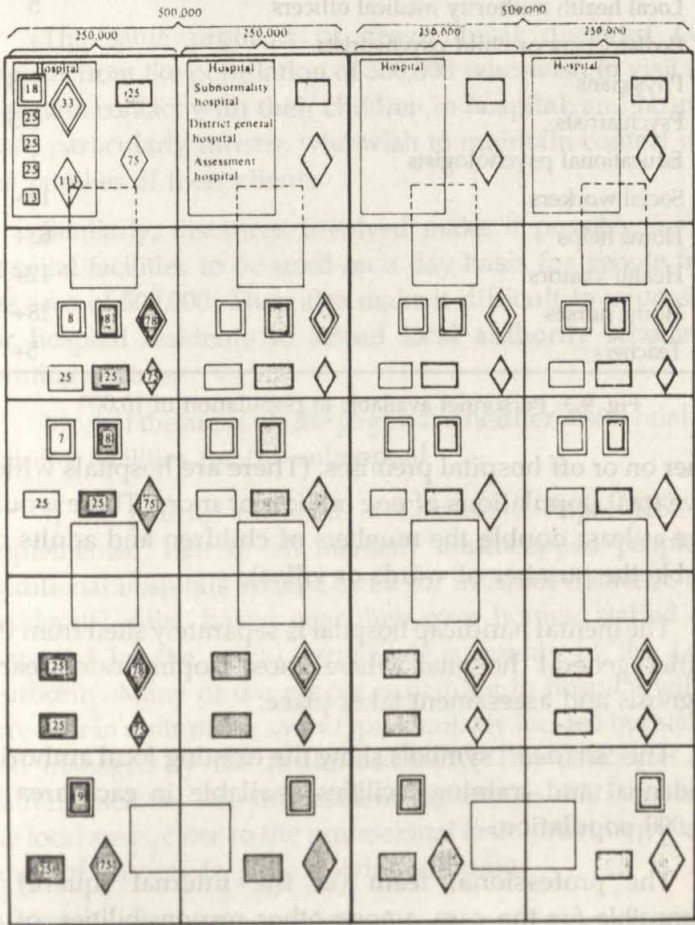


Figure 2. Future services (command 4,683) for mentally handicapped in a total population of 1,000,000. For key, see Figure 1.

Fig. 2

G.P.'s	40
Local health authority medical officers	5
Pediatricians or child psychiatrists	1
Physicians	1.8
Psychiatrists	1.5
Educational psychologists	1
Social workers	12+
Home helps	63+
Health visitors	12+
Home nurses	18+
Teachers	5+

Fig. 9.3. Personnel available to population of 10,000.

either on or off hospital premises. (There are hospitals which serve total populations of one million or more. These would have at least double the numbers of children and adults on double the number of wards or villas).

The mental handicap hospital is separately sited from the district general hospital where most sophisticated early diagnosis and assessment takes place.

The "shaded" symbols show the existing local authority residential and training facilities available in each area of 250,000 population.

The professional team (in the internal square) is responsible for the care, among other responsibilities, of *all* mentally handicapped people living at home or in local authority facilities. If they wish to follow up their clients in hospital facilities for the mentally handicapped, they must go to the site of the hospital. In this hospital, the clients may be on any of the 15 wards. Indeed, it is more usual that the mentally handicapped from an area of 100,000 population will *not* be in *one* hospital serving 500,000. They are more likely to be scattered around in three or four such hospitals and they

will accordingly be dispersed through between 15 and 45 wards.

The same problem of geographical dispersal faces parents from the population of 500,000 who wish to visit and maintain contact with their children in hospital, and hospital staff, particularly nurses, who wish to maintain contact with the families of their clients.

Similarly, distances involved make it possible for the hospital facilities to be used on a day basis for people from the area of 500,000. They also make it difficult to impossible for hospital residents to attend local authority schools or training centres.

Most of the areas on the page have neither residential nor training facilities for the subnormal.

If the policies outlined in Command Paper 4683 are implemented, half of all mentally handicapped people in traditional hospitals will be cared for in small domestic-type residential units, based near their own homes, staffed and managed by the social service departments of the Local Authority. Many of the people remaining in hospital will be cared for in units of the same type, similarly located but staffed and managed by the health authority. The education and training facilities like the residential facilities will be sited in the local areas, close to the professional team providing a wide range of services to people living at home.

The main features of the future service are shown in Figure 9.2:

1. Where there are two mental handicap hospitals there will be four, each serving a total population of 250,000. These hospitals will be either on, or closely associated with, the local District General Hospital.
2. Where each hospital had about 15 wards of about 50 people each, there will be about 5 wards ("domestic"

in character) each holding around 25 people. The remainder of those in residential care will be in local authority accommodation.

3. Some of the hospital facilities will be developed in the middle of the residential areas where the families live. (The diagram shows two such children's units and two adults units in each area of 250,000.)
4. Because of the geographical siting of the mental handicap hospitals, half of the people attending the hospital school and training centre will come daily from their own homes. Similarly, nearly half of the hospital residents will attend local authority school and training centre facilities outside the hospital on a day basis.
5. The hospital will be "aligned" (for example, take only clients from its 250,000 population) and wards will be "sectorized" (for example, take only clients from a subarea, say; 5,000 of the whole area). (Paragraphs 266, 267). This arrangement will enable the professionals from outside the hospital to maintain easy continuing contact with their clients who are in a ward of one hospital. Moreover, the doctors, teachers, and particularly the nurses staffing a "sectorized" ward of the hospital will be able to take an increasing interest in the care of the mentally handicapped living at home. The area with which they need to become familiar will be small and they should easily be able to liaise with the non-hospital professionals from the area.
6. There will be a very large expansion of local authority residential and training facilities in areas previously completely without such services.

Provided that these are also "sectorized," the clients will be easily accessible to their families and to the professional teams undertaking their continuous assessment.

Future Developments in the Research Team

In our work for the mentally handicapped we have found ourselves following a cycle of action and research, like this:

- Stage I: Survey of existing demands, resources and problems, (The 1973 survey of mental handicap in Wessex).
- Stage II: Recommendation of a solution and experimental implementation (setting up the locally based hostels, with traditional services as a control).
- Stage III: Evaluation of the experimental solution (studies of quality of care and family experience).
- Stage IV: Reassessing the demands, resources, and problems and recommending further solutions and modifications to earlier solutions. These will in turn be evaluated.

We are currently approaching the end of Stage III in our mental handicap work. However, many features of this work appear also to be relevant to other fields. The team is in the early stages of a similar project on services for the elderly. In this project we are still at Stage I and moving into Stage II. Some aspects of the relative sizes of the two target populations, the old with behavioural deficits and the mentally handicapped, can be seen from Table 9.4, which compares, in crude rates per 100,000, the number of people involved (Kushlick, 1972).

It has been necessary to develop a conceptual framework which allows the team members to research the two target populations collectively. The early stages of these developments and the research objectives are described in our latest report to our Scientific Advisory Committee (Health Care Evaluation Research Team, 1973).

Table 9.4. Social incapacities in a total population of 100,000 among (A) elderly, (B) mentally handicapped of all ages.

(A)			(B)		
Elderly (aged 65+)			Mentally handicapped (all ages)		
Bedfast	350	(220)*	21	(8)	Non-ambulant
Confined to home	1410	(1300)	31	(7)	Severe behaviour problems
Mobile outside with difficulty	1020	(910)	14	(4)	Severely incontinent
None of above	9240	(9100)	247	(142)	None of above

*Parentheses show those living at home.

Effort will be directed towards setting up a locally based, comprehensive, service for both elderly people and mentally handicapped people. In this a key ingredient will be that the locally based personnel servicing clients both at home and residential care jointly set, attain, and monitor specified goals with respect to their clients. This will include goals with respect to identification and manipulation of organic variables affecting the clients' behaviour (the medical or biological aspect), the clients' behaviour itself, and the environment in which it takes place (social, educational or rehabilitation aspect) (Kushlick, 1974).

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10

IMPROVING SOCIAL SKILLS AND PEER GROUP ACCEPTANCE

Inclusive educational settings create a situation where children with disabilities can increase their social competence. It is important to note, however, that such an increase in social competence certainly does not always occur automatically (Vincent 1995).

The results of most studies of integration and inclusion do not support the belief that merely placing a child with a disability in the mainstream spontaneously improves the social status of that child (Slavin 1991; Sale and Carey 1995). There is actually a danger that the child will be marginalized, ignored or even openly rejected by the peer group. This situation must not be allowed to occur since it is evident that poor peer relationships in early school life can have a lasting detrimental impact on social and personal competence in later years (Taffe and Smith 1993). It is for this reason that establishing good social relationships with other children has been described as one of the most important goals of education (Cooper and McEvoy 1996).

Opportunities for Social Interaction

For positive social interaction and the establishment of friendships to occur among children with and without

disabilities at least three conditions must be present (Falvey and Rosenberg 1995):

- *opportunity*: that is, being within proximity of other children frequently enough for meaningful contacts to be made;
- *continuity*: being involved with the same group of children over a relatively long period of time, for example, several consecutive years; and also seeing some of the same children in your own neighbourhood out of school hours;
- *support*: being helped to make contact with other children in order to work and play with them; and if possible being directly supported in maintaining friendships out of school, for example, by being driven to a friend's home or being allowed to sleep over at a friend's house at weekends. This is particularly important in the case of children with disabilities.

Inclusive schooling provides the opportunity for friendships to develop in terms of proximity and frequency of contact, and in terms of potential continuity. It creates the best possible chances for children with disabilities to observe and imitate the social interactions and behaviours of others (Snacks, Kekelis and Gaylord-Ross 1992). What inclusive classrooms must also provide is the necessary support for positive social interactions to occur. This is particularly important for students who are low in self-esteem and confidence and who are missing some of the basic social skills.

When students with disabilities are placed in regular settings without adequate preparation or support, three basic problems may become evident:

- disabled children, contrary to popular belief, do not automatically observe and imitate the social models which are around them;

- children without disabilities do not readily demonstrate high levels of acceptance of those with disabilities;
- some teachers do not spontaneously intervene positively to promote social interaction on the disabled child's behalf.

In relation to the last of the three points above, it seems that teachers in general are becoming much more aware of the need to intervene and assist children in establishing friendships in class (English *et al.* 1996; Lowenthal 1996). Strategies for encouraging the social development of children feature much more frequently now in training and development programmes for teachers than was the case a few years ago.

However, even with this increase in awareness of the importance of social development, some teachers still inadvertently deal with children emotionally and physically, in ways which contribute to the social exclusion of some class members. Some examples from the 'hidden curriculum' which influences attitudes and beliefs will illustrate this point.

- Teacher A always selects two team-leaders for outdoor games with the instruction to 'choose your own teams'. Guess who is always chosen last or excluded because she is poorly coordinated? This situation could be totally avoided by the use of a different organizational strategy.
- Teacher B always has Wayne sitting near her table so that she can more easily control his behaviour and provide help when needed. While serving to 'maintain' Wayne in the classroom, and attending to two of his educational needs, the approach inevitably isolates the boy from normal interactions with other children during deskwork time. This may not be a problem if he is programmed into group work and pair activities at other times in the day; but he may not be.

- Teacher C believes that Linda must have individual work assignments set because she can't cope with the general level of classwork (and this teacher never uses ability or friendship grouping for any purposes). The teacher spends time and effort in programming appropriate material for Linda and even provides a carrel for her to work in, away from the other children. While this is totally defensible as a method of catering for this child's academic learning needs, it must be recognized that it virtually eliminates any social interaction and highlights her 'differences' in the class setting. Is this 'inclusive practice'?
- Teacher D rarely visits the school-yard unless on duty. If Teacher D spent a little time observing David in this setting he would find that this boy is always ignored by other children at lunchtime and at morning break. He spends his time by the door waiting to come back into the classroom.

It seems that some teachers may need to develop more sensitivity to these situations, and also to recognize failures in peer relationships when they occur. They also need to be willing to implement suitable strategies to bring about improvements in children's social interaction in the classroom. Some of these identification and intervention strategies will now be discussed.

It must be clear that, although reference is made frequently here to children with disabilities, the approaches discussed here are equally applicable to any child who needs help in: personal-social development.

Identification of Children with Peer Relationship Problems

Naturalistic observation

The most obvious strategy for identifying children with

particular problems is the informal observation of social interactions within and outside the classroom (Howell, Fox and Morehead 1993). A teacher who takes the trouble to note the ways in which children play and work together will quickly identify children who are neglected by their peers or who are openly rejected and become an object of ridicule and teasing. It is very important also to try to observe the surface reasons which appear to give rise to this situation. For example, is the child in question openly obnoxious to others through aggression, hurtful comments, a tendency to spoil games or interfere with work? Or at the other extreme, does the child seem to lack motivation, confidence and skills to initiate contact with others, remaining very much on the outside of any action?

Naturalistic observation is probably the most valuable method of identification for the teacher to use since it focuses on the child within the dynamics of peer group interactions and can thus indicate a number of factors which might be modified.

Sociometric survey

Naturalistic observation tends to identify the most obvious cases of popularity or rejection. It may not pick up some of the subtleties of social interactions in the class. For this reason some teachers find it useful to carry out a whole-class survey in order to get all the children to indicate, in confidence, their main friendship choices (Serna 1993). The teacher may interview each child privately or, if the children can write, may give out slips of paper with the numerals 1 to 3 printed on them. The teacher then requests that each child write down first the name of the person he or she would most like to play with or work with as a partner in a classroom activity or at lunchtime. The teacher may then say, 'If that person was away from school who would you choose next?' and that name is listed second. A few teachers might also say,

'If there is anyone in the class you really don't like to work with or play with you can write that person's name against number 3. You don't *have* to write any name there; if you get on well with everyone, just leave it blank.' (This last procedure is sometimes criticized by teachers who fear that children may afterwards discuss what they wrote. If handled carefully this problem should not arise.) When the papers are collected the teacher calculates the score for each child on the basis of two points for a first choice and one point for a second choice. If Susan is chosen three times as the first preference by other children and twice as second preference, her total score is eight points. The results for each individual in the class can then be tabulated. Some teachers go so far as to map the choices in the form of a sociogram, showing the 'stars' (most popular), the 'isolates' (not chosen by others), mutual pairs and cliques, etc.

The information gained from a survey of this type may not only help a teacher identify children who are of low sociometric status but also to determine the composition of certain working groups in the class. It can sometimes be useful in identifying which children are named as first preference or second preference by the isolates even though the choice was not reciprocated. There may be a chance to pair these two children for some activities. However, it is often found that isolates merely name the stars in the class and the choice is not realistic. Children who are not chosen or who are listed as 'not liked' should obviously become the target for some of the intervention strategies described in this chapter.

Peer ratings

Gresham (1982) advocates the use of a peer rating scale rather than a sociometric survey since he feels that this provides a better measure of 'likeability'. Also it ensures that some children are not forgotten or over-looked as may happen with a sociometric survey of the type described above.

The children are provided with a list of the names of all children in the class and required in confidence to place a score from 1 (not liked very much) to 5 (liked a lot) against each name. Summation of the completed scores will reveal the children who are not liked by most class members as well as showing the level of acceptance of all other children. The result may sometimes correlate highly with naturalistic observation, but occasionally quite subtle positive or negative attitudes appear which are not immediately obvious to outside observation.

Mapping friendship patterns

Falvey and Rosenberg (1995) have presented the idea of using a 'Circle of friends' diagram, using three or four large concentric circles drawn on paper or on the blackboard. In the inner circle the child's name is written. In the next circle moving out from the centre are written the names of all the most important people in that child's life (parents, care-givers, closest friends, etc.). In the next circle out are written the names of all the other people the child is friendly with in his or her class or group. In the outer circle are written the names of other people the child knows and gets on with, but who are not classed as actual friends. The diagram which results from this activity presents a helpful picture of the child's network of contacts. In some cases it can even prove to the child who feels that he or she has no friends that indeed many names do go into the diagram.

It is suggested that a circle of friends diagram can be developed from a small group activity, or by working individually with a child. When working individually and in confidence the teacher might suggest that they write outside the boundary of the diagram the name of any person the child dislikes. Falvey and Rosenberg (1995) suggest that discussions emerging from the process can help to identify support networks for the child with a disability and can influence the composition of classroom work groups.

Teacher ratings

The use of checklists which specify important indicators of social competence can be helpful in providing a clear focus for teachers' observations of children (Serna 1993; Vincent 1995). The items in the checklist would normally be those responses and behaviours considered to comprise 'social skills', such as greeting, interacting with others, sharing, avoiding, conflict, etc.

Parent nomination

Sometimes a child's social relationship problems at school may be brought to the teacher's attention first by the parent who says 'I'm worried about Paul. He doesn't bring any friends home and doesn't play with other children after school', or 'Marion has been coming home from school saying that the other girls are making fun of her in the yard and on the bus'. This type of information should be followed up by the teacher and treated in a sensitive manner.

Over to you: Social relationships in the classroom

- Use the sociometric survey or the rating scale procedure described above with your class. Before charting the results try to predict those children who will obtain high scores and those who will obtain low scores. How accurate was your prediction? Did your survey reveal any unexpected information? How might the results of this exercise help you in your day-to-day work with your class?
- If the activity is age-appropriate for your class, try the 'Circle of friends' procedure.

Creating a Supportive Environment

To facilitate social interaction for children with special needs in regular classrooms three conditions are necessary:

- the general attitude of the teacher and the peer group needs to be made as positive and accepting as possible;

- the environment should be arranged so that the child with a disability has the maximum opportunity to spend time socially involved in a group or pair activity, during recess and during academic work in the classroom;
- the child needs to be taught the specific skills that may enhance social contact with peers.

Influencing attitudes

Lack of previous experience with disabled children, and a lack of knowledge about disabilities, can lead children (and even teachers) to feel uncomfortable in the presence of a person with a disability. This, in turn, causes them to avoid contact where possible. Where the disabled individual has a marked speech and communication problem, has an unusual physical appearance and is poorly co-ordinated, the difficulties are greatest. Gow and Ward (1991) have noted that students with moderate intellectual disability and language problems are the most difficult to include successfully in regular classrooms. In extreme cases, ignorance concerning disability can result in quite damaging prejudice, hostility and rejection (Hickson 1990).

Fortunately, evidence is accumulating to show that attitudes can be significantly changed in teachers and in the peer group. Teachers and peers tend to become more accepting of children with disabilities when they better understand the nature of the disability. Experience has shown that a combination of information about, and direct contact with, disabled children provides the most powerful positive influence for attitude change in both teachers and in the peer group (McCoy 1995). It is also evident that attitude change tends to be a long and gradual process.

Children's attitudes are likely to be influenced most when teachers work to build a climate of concern for others

in the classroom (Salisbury, *et al.* 1995). This can be achieved in part by the teacher's own example, and also by the open discussion and resolution of problems that may arise from time to time. Facilitating and encouraging peer assistance and buddy systems in the classroom can also be useful.

The following approaches, particularly when used in combination, have all been beneficial in improving attitudes toward children with disabilities. Throughout these 'awareness raising' techniques the stress should be upon 'How can we help?'; 'How would we treat someone like that in our class?'; and 'Notice how much that person can already do unaided'.

- Viewing films or videos depicting disabled children and adults with disabilities coping well and doing everyday things.
- Factual lessons and discussion about particular disabilities.
- Having disabled persons as visitors to the classroom or as guest speakers.
- Simulation activities, e.g. simulating deafness, or vision impairment or being confined to a wheelchair. (None that unfortunately two conditions which cannot be simulated are intellectual disability and emotional disturbance. These are also the two disabilities which produce the greatest problems in terms of social isolation and rejection in the peer group.)
- Reading and discussing stories about disabled persons and their achievements.
- * Regular visits as helpers to special schools or centres.

Creating opportunities

If social learning is to take place it is essential that the socially inept child has the opportunity to be truly involved in all group activities both inside and outside the classroom.

If children with disabilities are to be socially integrated then group work situations and co-operative learning should be used frequently in preschool, primary and secondary settings (Slavin 1991; Honig and Wittmer 1996; Lowenthal 1996). Unfortunately, while grouping and activity methods are common in the early years of schooling they are rather less common in the middle school or upper primary school. Even less are they used in the later years when children are often faced with a rigorous academic curriculum and a fairly rigid timetable.

Much of the work which has supported the value of co-operative learning and grouping within the classroom has been carried out by two brothers, Roger and David Johnson (1991; Johnson, Johnson and Holubec 1990). They make two assumptions: that teachers create classroom environments where competition is not a dominant element: and that teachers use grouping strategies to encourage co-operation among students for at least part of each day. Regrettably both assumptions prove to be false when applied to certain classrooms. Some teachers still use too much competition among their children on a regular basis, and some make no use at all of co-operative group work. Some teachers keep the children in formal settings, all working on the same material for the same time regardless of individual differences, and may actively discourage any discussion and collaboration. The implications here are that if a teacher rarely, if ever, uses grouping as an organizational option, it is unlikely that much will be achieved in terms of social inclusion of students with special needs (Salisbury *et al.* 1995).

Organization for group work

The success of collaborative group work depends on classroom organization, the nature of the tasks set for the students to work on and the composition of the working groups (Lyle 1996). Too often group work begins to become chaotic because the tasks set are too vague or too complex, the

students are not well versed in group-working skills and the room is not set up to facilitate easy access to resources. It is essential that all group work has a very clear structure which is understood by all. Careful planning is required if group work is to achieve the desired educational and social outcomes.

When utilizing group work as an organizational strategy it is important to consider the following basic principles.

- Merely establishing groups and setting them to work is not enough. Group members have to be taught how to work together. They must be shown the behaviours which encourage or enable co-operation, e.g. listening to the views of others, sharing, praising one another, offering to help each other. If the task involves the learning of specific content, teach the children how to rehearse and test one another on the material.
- Teachers must carefully monitor what is going on during group activities and must intervene when necessary to provide suggestions, encourage the sharing of a task, praise examples of co-operation and teamwork and model co-operative behaviour themselves. Many groups can be helped to function efficiently if the teacher (or the aide or a parent helper) works as a group member without dominating the situation.
- The way in which individual tasks are allotted has to be very carefully planned (division of labour); the way in which each child can assist another must also be made explicit, e.g. 'John, you can help Craig with his writing then he can help you with the lettering for your title board'. Contingent praise for interacting with others should be descriptive. 'Good, John. I can see your friend really appreciates you holding the saw for him.' 'Well done Sue. That's nice of you to help Sharon with that recording.'

- The size of the group is also important. Johnson and Johnson suggest a group of two or three members if the children are young or are unskilled in group work. Select the composition of the group carefully to avoid obvious incompatibility. Information from a sociometric survey may help to determine appropriate partners for less popular children.
- The choice of topic and tasks for group work is very important. Tasks have to be selected which *require* collaboration and teamwork. Lyle (1996) comments that children are often seated in groups in the classroom, but are expected to work on their individual assignments. This does not involve productive collaboration, and the arrangement often creates difficulties for the individual student in terms of not completing assignments due to distractions.
- Initially, there is some merit in having the groups of children working co-operatively on the same task at the same time. The procedure makes it much easier to prepare resources and to manage the time effectively (Lyle 1996). When each of several groups are undertaking quite different work it can become a major management problem for the teacher, unless the students concerned are already very competent and experienced in working independently.
- When groups contain some students with special needs it is vital that the specific tasks and duties to be undertaken by those students are clearly delineated. It can be useful to establish a system whereby the results of the group's efforts are rewarded not merely by what individuals produce, but also by the way in which they have worked positively and supportively together. Under this structure, group members have a vested interest in ensuring that other members learn, as the

group's success depends on the achievement of all. Helping each other, sharing and tutoring within the talk (talk specifically directed to another person and requiring a reply) by almost three times the level present under whole-class conditions.

- Room arrangement is important. Group members should be in close proximity but still have space to work on materials without getting in each other's way.
- Group work must be used frequently enough for the children to learn the skills and routines. Infrequent group work results in children taking too long to settle down.

Facilitating Social Interaction

What other strategies can be used to enhance the disabled child's chances of positive social integration?

- 'Peer tutoring', 'buddy systems' and other helping relationships have all been found effective to a greater or lesser degree; some can result in the development of genuine and lasting friendships.
- A greater use of games and play activities of a non-academic type can place the disabled child in situations where he or she can more easily fit in and work with others.
- Make a particular topic (e.g. 'Making friends' or 'Working together') the basis for class discussion. 'If you want someone to play with you at lunchtime what would you say to that person?' 'If you saw someone in the school-yard who had just started at the school today how would you greet them? How would you make them feel welcome?' Sometimes teachers prepare follow-up material in the form of worksheets with simple cartoon type drawings and speech balloons

into which the children write the appropriate greetings or comments for the various characters. Much of this can be incorporated into a total 'social education' programme.

- It is important to get the peer-group members to reinforce and maintain social interactions with disabled children. Often they are unaware of the ways in which they can help. They, too, may need to be shown how to initiate contact, how to invite the child with special needs to join in an activity, how to help the child with particular school assignments, etc.

Social Skills Training

One of the main reasons why certain children are unpopular is that they lack appropriate social skills which might make them more acceptable. They are in a Catch-22 situation since friendless students have no opportunity to practise social skills, and those with poor social skills are unable to form friendships. As Ariel (1992: 354) has commented, 'Problems in social skills are more debilitating than academic problems and hinder the ability to succeed in life'.

Social isolation in childhood may have serious long-term consequences in terms of mental health in adult life, so it is vital that isolated and rejected individuals are helped to overcome some of these problems as early as possible. Fortunately there is growing evidence that social behaviours which contribute to positive personal interaction with others can be taught and can have lasting effects (Grossman 1995). However, while most social skills training programmes do produce positive effects, there is always a problem with maintenance of the trained skills over time, and generalization of the skills to new settings (Taffe and Smith 1993). It must also be noted that even when children with disabilities are specifically trained in social skills, some may not find it any

easier to make friends. For example, Margalit (1995) found that students with intellectual disability still reported feelings of loneliness even after successfully participating in a social skills programme.

Even given the cautionary comments above it is still a high priority in inclusive settings that students who lack specific social skills be provided with every opportunity, including specific training, in order to acquire them. When students with special needs do improve their social skills their peers relate better to them, thus reinforcing and helping to maintain the improvement to some degree (Grossman 1995). Without social skills training, children with disabilities are more likely to interact with any *adult* present in the particular setting rather than with other children (English *et al.* 1996).

What are 'social skills'?

Broadly speaking social skills are those components of behaviour that are important for persons to initiate, and then maintain, positive interactions with others. Ariel (1992) lists as many as thirty different social skills. A somewhat condensed list includes the following specific behaviours necessary for social competence.

Basic social skills

- Eye contact: being able to maintain eye contact with another person to whom you are listening or speaking for at least brief periods of time.
- Facial expression: smiling, showing interest.
- Social distance: knowing where to stand relative to others; knowing when physical contact is inappropriate.
- Quality of voice: volume, pitch, rate of speech, clarity, content.
- Greeting others: initiating contact or responding to a

greeting; inviting another child to join you in some activity.

- Making conversation: age-appropriate conversational skills; expressing your feelings: asking questions; listening; showing interest; responding to questions asked.
- Playing with others and working with others: complying with rules, sharing, compromising, helping, taking turns, complimenting others, saying thank you, saying you're sorry.
- Gaining attention and/or asking for help: using appropriate ways.
- Coping with conflict: controlling aggression, dealing with anger in self and others, accepting criticism, 'being a sport'.
- Grooming and hygiene.

The above list represents a fairly complex amalgam of non-verbal and verbal skills which all appear crucial for successful social interaction.

As well as having the appropriate social skills an individual also needs *not* to have other behavioural characteristics which prevent easy acceptance by others, e.g.; high levels of irritating behaviour (interrupting, poking, shouting etc.); impulsive and unpredictable reactions; temper tantrums; abusive language; cheating at games. In some cases these undesirable behaviours may need to be eliminated by behaviour modification or cognitive behaviour modification procedures.

Some writers find it useful to view social skills not as merely 'verbal' or 'non-verbal' but rather as being mainly either 'cognitive' or 'overt'. Cognitive functions include: knowing what to do or not to do by interpreting social cues

in a situation (e.g. knowing when an adult is ready to be approached and has time to listen): empathizing with or understanding the feelings of others; and anticipating the results of your actions. Overt functions include the actual behaviours exhibited: e.g. smiling, gesturing, speaking at an appropriate volume, making eye contact, not standing too close to another person when speaking, etc. Children with intellectual disability and those with genuine emotional disturbance tend to have difficulty in acquiring the cognitive functions even after overt functions have been taught. This is to be expected since the acquisition of these functions (e.g. the concept of what constitutes 'a friend') follows a developmental sequence in all children. Children with special needs will be very much later in reaching a full understanding of such matters. In some cases the problem has been exacerbated by parents who have overprotected the child and thus reduced social involvement with others.

How are social skills taught?

Most programmes for training social skills have been based on a combination of modelling, coaching, role-playing with rehearsing, feedback and counselling. At times, video recordings have also been used to provide examples of social behaviours in action and to provide the trainee with feedback on his or her own performance or role-play.

In an individual case the first step is obviously to decide where to begin, what the priorities are for this child. Csapo (1983) suggests that teachers should observe and analyse not only what the child does and does not do already, but should also determine the specific social skills needed and valued in that particular age group or class. It is pointless to teach skills which in that particular context are not immediately functional.

The most meaningful setting in which to enhance a child's social skills are, of course, the classroom and school-yard. At times a teacher needs to intervene to assist a child to

gain entry to a group activity or to work with a carefully chosen partner. The teacher must also praise and reinforce both the target child and the peer group for all instances of co-operative, helpful and friendly behaviour. However, *in situ* intervention is not always feasible, particularly in extreme cases of withdrawal or rejection. Sometimes it may be necessary for a child to be coached thoroughly in a particular skill away from the class situation before that skill can be used in the peer group setting. Franco *et al.* (1983) provide an excellent example of this from a case study of a very shy adolescent. These practitioners focused on conversational skills as being the most important to establish in this youth. In a withdrawal room they worked on four areas; asking questions of others, making reinforcing comments and acknowledging what others say, showing affective warmth, and maintaining eye contact. Sessions were held twice weekly for twenty minutes over a fifteen-week period. After explanations and demonstrations from a tutor, the youth then practised these behaviours with the tutor and applied them in a series of ten-minute conversations with different male and female partners (to aid generalization). The partners were previously instructed to be warm and friendly but to refrain from asking questions of the subject unless he asked one first. They were also told to keep their responses brief so that the onus would be on the subject to maintain the conversation. The subject was instructed to adopt the strategy of finding out as much as possible about the other person's interests and to keep the conversation going. Observations were made at intervals after the coaching sessions had finished and significant and durable improvements were reported in his classroom interactions.

Coaching in social skills: six steps

The general training pattern used in a typical social skills programme follows a sequence of steps:

Definition. Describe the skill to be taught. Discuss why this particular skill is important and how its use helps interaction to occur. The skill may be illustrated in use in a video, a picture or cartoon, a simulation using puppets or pointed out to the child by reference to activities going on in the peer group. The teacher may say 'Watch how she helps him build the wall with the blocks'; 'Look at the two girls sharing the puzzle. Tell me what they are saying to each other.'

Model the skill. Break the skill down into simple components and demonstrate these clearly yourself, or get a selected child to do this.

Imitation and rehearsal. The child tries out the same skill in a structured situation. For this to occur successfully the child must be motivated to perform the skill and must attend carefully and retain what has been demonstrated.

Feedback. This should be informative. 'You've not quite got it yet. You need to look at her while you speak to her. Try it again.' 'That's better! You looked and smiled. Well done.' Feedback via a video recording may be appropriate in some situations.

Provide opportunity for the skill to be used. Depending upon the skill just taught small group work or pair work activities may be set up to allow the skill be applied and generalized to the classroom or other natural setting.

Intermittent reinforcement. Watch for instances of the child applying the skill without prompting at other times in the day and later in the week. Provide descriptive praise and reward. Aim for maintenance of the skill once acquired. To a large extent these behaviours, once established, are likely to be maintained by natural consequences, i.e. by a more satisfying interaction with peers.

Over to you: Social skills development

- Select a social skill from the list provided in this chapter (e.g. 'Working with others' or 'Gaining attention'). Plan a series of activities following the six steps above in order to teach and maintain that skill in a child.
- Some of your colleagues in school suggest that social skills should be an 'across the curriculum' responsibility and not treated as a separate topic. How do you respond to this suggestion? Is there a place for a social skills curriculum in its own right? How would it be implemented?

Summary

Many children with disabilities or learning difficulties encounter problems of peer group acceptance when placed in regular classes. In addition, some students without any specific disability also experience these social difficulties. The ways in which attitudes can be improved and the environment modified to facilitate social interaction, and the teaching of specific social skills have been described in this chapter. Evidence suggests that, in the past, teachers often overlooked and therefore neglected this aspect of a child's learning and development in school, but now teachers are more aware of the issues involved. Much can be done to assist children with social and personal problems and teachers are recognizing their responsibility in this area. To be effective an inclusive classroom programme must include provision for enhancing the social acceptance of all students with special needs.

Poor scholastic achievement seems to be a factor leading to poor social acceptance, even after social skills have been taught. Unless achievement within the curriculum can also be increased, acceptance may remain a problem for some children. Attention is therefore focused on acceleration of basic academic skills.

Discussion points

- Anna is in Year 3 at school and is an extremely shy and timid child. She does not cause any problems in the classroom and her general bookwork is of a good standard. Her teacher has become increasingly concerned that he cannot get Anna to be more forthcoming and assertive both inside and outside the classroom setting. He feels that, if any thing. Anna is becoming even more withdrawn. What should he do?
- Many emotionally disturbed children lack the social skills to enable them to relate easily to other children in regular or special classes. A significant number of such children are not only anti-social but also openly aggressive and hostile. Imagine that you have such a child in your class. Describe the steps you might take to modify this child's aggressive behaviour and make him or her more socially acceptable in the group.

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11

SUPPORTING DEVELOPMENT IN WRITING

Perhaps more than any other area of the curriculum, writing presents major problems for the student with learning difficulties. According to Zipprich (1995) and Wong *et al.* (1996), these students exhibit difficulties with the composing skills of planning, sequencing ideas, editing and revising. They also have problems with the more mechanical aspects, such as handwriting, spelling and punctuation. In Isaacson's (1987) review, where unskilled writers were compared with skilled writers, the following problems were identified in the unskilled writers:

- they spent very little time in planning before they started to write;
- no rough draft notes were prepped before writing;
- ideas were not composed in a logical order;
- either very simple sentence structures used, or long and rambling sentences were constructed with repetitive use of conjunctions;
- simple words were favoured over more interesting and expressive words;
- certain words were used repetitiously (e.g. 'and then', 'nice', 'really big', 'really small', 'really fast', etc.);

- not much material was produced in the available time;
- the writers were reluctant to review and revise their work;
- many spelling errors were made;
- punctuation was often omitted, or was added idiosyncratically.

Writing is certainly the most demanding of the language arts. It is fortunate that contemporary approaches to the teaching of writing have done much to alleviate the anxiety and frustration which, in years gone by, many of the lower-ability students experienced whenever 'writing' or 'composition' appeared on the timetable. To them it meant a silent period of sustained writing with little or no opportunity to discuss work or ask for assistance. Great importance was placed on accuracy and neatness at the first attempt and many children must have felt extremely inhibited. Even when the teacher wasn't a severe judge of the product, the children themselves sometimes carried out self-assessment and decided that they couldn't write because their product was not perfect. An attitude quickly developed in the child, 'I can't write', and a failure cycle was established.

The change that has occurred in recent years has been a shift of emphasis from finished product to the actual processes of composing and revising. The method is represented best in the 'process-conference approach' of Donald Graves (1983).

The Process-Conference Approach

Briefly, the process-conference approach embodies the following principles.

- Writing, as a process, usually involves a number of separate stages, from the initial hazy formulation of ideas to the first written draft, though subsequent

revision and editing to a final product (although not all writing should be forced to pass through all stages). Students need to have these stages made explicit.

- Teachers themselves should write in the classroom and thus demonstrate the composing, editing and publishing stages in action.
- When writing, the choice of topic should usually be made by the writer, as personal narrative is likely to result in the most lively and relevant communications.
- The teacher should confer with each and every student about the writing being produced. This involves far more than the automatic dispensation of praise and encouragement: and it will involve quite different amounts of time and advice according to individual needs and abilities.
- A student writing in a classroom has a potential audience not only in the teacher but also the peer group. A friend or partner can be used as a sounding board for ideas and can read, discuss and make suggestions for written draft.
- When possible and appropriate students' work should be 'published' for a wider audience (class book, display board, school library, etc.)
- The results appear to be particularly encouraging when the process approach is combined with use of a word processor.

It should be noted that the process-conference approach to writing can certainly be regarded as an inclusive practice as it involves collaboration between students, and between teachers and students. Each and every student can be helped to produce and share something of personal worth in the form of a written recording.

According to Milem and Garcia (1996) the three important guidelines to apply when first introducing process writing are:

- allow students to ease into the writing process as a group before asking them to write as individuals;
- initially, help the students choose topics about which they have strong opinions and ideas;
- model frequent writing and sharing yourself; and also model mature acceptance of constructive criticism.

Milem and Garcia (1996) have strongly supported the use of 'process writing' with learning disabled students, including those in the high-school settings.

Providing Special Assistance

General Principles

The first important step in improving writing skills is to allocate sufficient time for writing within the school day. It seems that writing is often seen as an adjunct to other subjects, rather than something which needs to have specific time devoted to it. If writing occurs daily there is much greater likelihood that motivation, confidence and writing skills will improve (Vallecorsa, Ledford and Parnell 1991).

It is also essential to give students an adequate stimulus for writing. The topic must be interesting and relevant, and students must see a purpose in transferring ideas to paper. Regardless of whether the activity involves writing a letter to a friend or composing a science-fiction fantasy story, the students should perceive the task as enjoyable and worthwhile.

In general, students need help most in two basic stages of the writing process, namely planning to write and revising or polishing the final product. The teaching of each of these stages of writing should embody the basic principles of effective instruction, namely, modelling by the teacher, guided

practice with feedback (mainly via the conference process between teacher and student) and independent practice.

Students with writing difficulties need to be given a clear structure which they can use whenever they write. In particular, novice writers appear to benefit most if they are taught specific strategies for generating ideas, composing and editing (Graves and Hauge, 1993; Martin and Manno 1995; Wong *et al.* 1996). They need to be given guidance in how to begin, how to continue and how to complete the writing task. In this context, students could be taught a set of questions to ask themselves which will facilitate the generation of ideas for writing, and will assist with the organization and presentation of the material across different writing genres.

Unskilled and reluctant writers

Students who exhibit difficulties in written expression fall into one of two groups. The groups are not mutually exclusive and there is some overlap in terms of instructional needs. The first group comprises those students of any age level who have learning difficulties or who have a genuine learning disability. For these students, the teacher needs to make any writing task very clear and structured enough to ensure their successful participation. The second group comprises those students of any age who can write but don't, the reluctant and unmotivated students. These students appear not to see the relevance of writing, or have not experienced the excitement of written communication and get no satisfaction from it. Some of these students may have encountered negative or unrewarding experiences during the early stages of becoming writers. They may have acquired what has been termed 'writing apprehension', which now causes them to avoid the task whenever possible. Their problem is one of poor motivation leading to habitually low levels of productivity. Here the teacher must try to regain lost interest and build confidence.

The classroom atmosphere which encourages all children to experiment and take risks in their writing without fear of criticism or ridicule is a very necessary condition for the least able students. However, in many cases, particularly with the upper primary or secondary student with a history of bad experiences in writing, simply creating the atmosphere is not enough; more than the ordinary amount of guidance and encouragement from the teacher will also be needed. Indeed, Graves (1983) describes some such children in his chapters titled 'How to help children catch up' and 'How to help children with special problems of potential'. His studies of the ways in which very young children begin to write and compose throw some light on the performance and needs of older children with difficulties in writing. In particular these studies indicate how important it is to view a child's writing attempts *diagnostically*, to determine how much a child can achieve unaided, and to observe the strategies he or she brings to the planning, composing, spelling and revising stages.

With some students with learning difficulties, the initial stimulus for writing may have to come from the teacher rather than from free choice. On the other hand, many students will have interests and experiences about which they can talk freely and can then be helped to write. The link here with the language-experience approach to reading for such children should be obvious: 'What I know about I can talk about. What I can talk about someone can help me to write. What I have written I can read.'

Graves (1983) suggested the following possible sequence in assisting young children with difficulties to produce something satisfying. In addition he says that such students need to be helped *daily* and usually during the first ten minutes of the lesson:

- initial 'warm up'—perhaps a few minutes spent with handwriting patterns or letter formation, or copying of something previously written;

- discussion of new topic for writing;
- a drawing for the topic;
- further discussion with teacher;
- composing one or two sentences;
- feedback from the teacher.

With low-achieving students, or those lacking in confidence, the teacher may have to structure the discussion very tightly at various stages, even to the extent of writing down key vocabulary and possible sentence beginnings for the students to use. Graves advises teachers not to be afraid of saying, at times, 'Try doing it this way'. Teachers are still permitted to teach! However, during the discussion and feedback stages (the 'conferring') the teacher should not overcorrect, but rather encourage the student to talk and to think. The main aim is to help the student generate ideas and then to sort these into an optimum sequence.

In the early stages it is important not to place under stress upon accuracy of spelling since this can stifle the student's attempts at communicating ideas freely. Invented spelling gives students the freedom to write with attention to content and sequence. Charles Cripps (1983: 22) makes an excellent point when he says, 'it is essential that a misspelling is never referred to as something "wrong" but instead as something nearly right'. As the student becomes more confident and productive, the teacher, while still remaining supportive, will make the conferring stage rather less structured. Enabling-type questions are still used to extend the student's thinking and to build upon the writing so far produced. The term 'scaffolding' has been used to suggest this surreptitious support which can be reduced gradually.

In the case of the least able students, particularly in upper primary and secondary classes, it will be mainly the teacher

who monitors the work in progress and who has most to offer when they confer. Extreme care must be exercised in using peers to read and comment upon the writing of other children with difficulties. In many classrooms the more able students will have a sufficiently positive attitude toward students who are less able, and can offer very useful assistance in a peer tutoring role. In other classrooms, or in some individual cases, the able writer may be inclined to ridicule any naive contributions and thus rapidly undermine the confidence and motivation of the student with difficulties. Peer critiquing is often written about and talked about as if it is a simple strategy to employ in the classroom, but actually it needs to be done with great sensitivity. Teachers must spend time in modelling the critiquing process before expecting students to implement it skilfully: e.g. how to highlight the good points, how to detect what is not clear, how to help with the generation of new ideas, how to assist with adding or deleting material and polishing the work.

Many of the lower-achieving students have, in the past, written very little during times set aside for writing. This is part of the vicious circle which might be described thus: 'I don't like writing so I don't write much, so I don't get much practice, so I don't improve... etc.'

Humes (1983) has advocated frequent writing practice (daily) and even to the extent of using 'speed writing' against a time limit (e.g. for five minutes), with students copying existing material as rapidly as possible to convince themselves that they can indeed 'write a lot' when style and accuracy are not to be judged. A modified form of precision teaching can be used to increase output of some students. The number of words or sentences written in a set time during writing lessons can be counted and charted each day (Lindsley 1992).

Small booklets are usually better than exercise books for students who are unskilled and reluctant writers. The opportunity to make a fresh start almost every week is far better than being

faced with the accumulation of evidence of past failures which can accrue in an exercise book. For students of all ages a loose-leaf folder may be very useful as a replacement for the traditional exercise book. There is a place for the daily diary, journal or news book; but teacher should avoid such writing becoming merely habitual, trite and boring. There is a danger of this being the case, even with students who can write well.

Leading from the points above it is obvious that our notion of 'free writing' for the least able students should be interpreted as 'freely-guided writing' in the early stages. Quite original ideas may be there, but the process of organizing them before getting them down on paper needs to be teacher-supported. As confidence and proficiency increase with the passage of time, the amount of direct help can be greatly reduced for most students.

Since the process-conference approach depends so much upon the student-writer having someone with whom to confer, it is important to consider other possible sources of assistance in the classroom. In addition to the teacher and the peer group, help may also be provided by teacher aides, older students (cross-age tutoring), college and university students on field placements, and parent volunteers. In all cases these helpers must know what their role is and will require some informal training by the teacher if they are to adopt an approach which is supportive rather than too demanding of perfection.

Over to you: Advice to helpers in a writing programme

- Assume that you need to provide some in-service training for a group of parents who have offered to help children write within a school-based learning assistance programme.
- List the basic principles you would wish them to apply when they work with the children.
- Add to your list as you move through the remaining sections of this chapter.

Some Specific Strategies

Providing a framework

The skeleton story

Getting started is the first obstacle faced by many students who find writing difficult. One simple way of helping them complete a story is by giving them the framework for a story, with sentence beginnings to be completed using their own ideas. Example:

Something woke me in the middle of the night.

I heard

I climbed out of bed quietly and

To my surprise I saw

At first I

I was lucky because.....

In the end

With groups of low-achieving students it is useful, through collaborative effort, to complete one version of the skeleton story on the blackboard. This completed story is read to the group. Each student is then given a sheet with the same sentence beginnings, but he or she must write a different story from the one on the blackboard. The stories are later shared in the group.

Cues and prompts

In helping students generate ideas and compose in writing Graham, Harris and Sawyer (1987) and Martin and Manno (1995) suggest that they be taught a framework of questions which they can ask themselves if necessary during the initial stages of planning—e.g. 'What happened first?' 'Where did it happen?' 'To whom did it happen?' 'What happened next?'

Questions such as 'What does it look like (size, colour, shape, etc.)'; 'What does it feel like?', will help students

become more descriptive in their writing. These temporary props are very useful for students who have difficulty in the planning stage of writing, but the students must not become too dependent upon such starting points.

Story webs

Story webs are very similar to the word webs referred to in the previous chapter. They can provide students with learning difficulties with a useful starting point from which to generate ideas for writing (Zipprich 1995).

A web is created by writing the main idea in the centre of a sheet of paper, then branching off from the main idea into different categories of information. These ideas and categories might include: the title in the centre, the setting for the story, the type of action to take place, the characters involved, the outcome, etc. Prompts and cues, as above, may need to be used to stimulate the students' thinking as the web is constructed. The brief notes in the web can then be elaborated into sentences and the sentences gradually extended into paragraphs.

Story planner

Gross (1993) uses a variation of the story web idea. In her approach, the title for a story is placed in the centre of the blackboard. Radiating lines, like the spokes of a wheel, are drawn out from the title. The students then brainstorm for ideas that might go into the story. In random order, each idea is briefly noted against a spoke in the wheel.

The class then reviews the ideas and decides upon an appropriate starting point for the story. A number '1' is written against that idea. How will the story develop? The children determine the order in which the other ideas will be used, and the appropriate numbers are written against each spoke. Some of the ideas may not be used and can be erased. Other ideas may need to be added at this stage, and numbered accordingly.

The students now use the bank of ideas recorded on the story planner to start writing their own stories.

By preparing the draft ideas and then discussing the best order in which to write them, the students have tackled two of the most difficult problems they face when composing, namely planning and sequencing.

Step-by-step planning

A task-approach strategy with a 'prompt word' can help some students to organize their thoughts for writing. An example is LESSER ('LESSER helps me write more!').

L = List your ideas.

E = Examine your list.

S = Select your starting point.

S = Sentence one tells us about this first idea.

E = Expand on this first idea with another sentence.

R = Read what you have written. Revise if necessary.
Repeat for the next paragraph.

Expanding an idea

Begin by writing a short, declarative sentence that makes one statement.

We have too many cars coming into our school parking area.

Next, write two or three sentences which add information to, or are connected with, the first sentence. Leave two lines below each new sentence.

We have too many cars coming into our school parking area.

The noise they make often disturbs our lessons.

The cars travel fast and could knock someone down.

What can we do about this problem?

Now write two more sentences in each space.

We have too many cars coming into our school parking area.

The noise they make often disturbs our lessons. The drivers sound their horns and rev the engines. Sometimes I can't even hear the teacher speak. The cars travel fast and could knock someone down. I saw a girl step out behind one yesterday. She screamed when it reversed suddenly.

What can we do about this problem? Perhaps there should be a sign saying 'NO CARS ALLOWED'. They might build some speed humps or set a speed limit.

Edit the sentences into appropriate paragraphs. Combine some short statements into longer, complex sentences. Edit for style. Use of a word processor makes each of these steps much faster and makes the process of editing and checking spelling easier.

The teacher demonstrates this procedure, incorporating ideas from the class. Students are then given guided practice and further modelling over a series of lessons, each time using a different theme.

Shuffling ideas

A strategy that helps to establish the value of planning and sequencing points before writing is that of 'shuffling ideas'. As ideas for writing are generated, each is written on a separate card. Finally, the cards are recorded until the most suitable and appealing sequence is obtained. The sequence can become the focal point for discussion between teacher and student or between two students. The procedure avoids the problem of reluctance which sometimes occurs when a student is asked to revise and rewrite a draft.

Group editing

To assist further with the development of revising and editing skills the whole class (or a small group of students) might look at a duplicated essay, or one displayed by an overhead projector, and make suitable alterations and improvements to it after discussion. The focus might be on adding more descriptive words, or on making ideas clearer by including more detail.

Sentence combining

Another useful editing activity is that of 'sentence combining'. Often the lower-achieving students will tend to write very short sentences, lacking fluency and variety. Suitable exercises can be devised to help students develop skills in combining sentences.

I went to watch netball.
I went with my friend Hannah.
We had a good time.
Our team got beaten.

These sentences can be combined in various ways, e.g.:

When I went to watch netball with my friend Hannah we had a good time, but our team got beaten.

To avoid the common problem of failure to generalize this type of learning to new contexts, students' attention will need to be directed back to this experience when they are editing and improving their own written work.

Writing a summary

The complementary skills of reading and writing come together in the task of writing a summary of precis of a passage, a chapter or a book. Casazza (1992) suggests that summarizing text helps students to focus on key points and to sequence these in writing in a coherent way. She presents

three basic rules for preparing a summary and states that students should be taught these rules explicitly and trained to use them independently. First they must identify the main idea and generate a statement which embodies the main idea. Then they identify minor or irrelevant detail and redundant information. Finally, they must combine statements or ideas which have similar information and link these to the main idea statement.

By using an overhead projector the teacher can model the application of the three rules to several different pieces of text. Students are then given guided practice and feedback. Casazza (1992) also advocates having students evaluate the summaries of their peer and of the teacher. A checklist can be used with a rating scale to allow for appraisal using such descriptions as:

- identifies topic clearly;
- identifies main idea correctly;
- paraphrases accurately;
- omits irrelevant detail;
- combines similar ideas coherently;
- stays within required word-length.

The use of such a checklist is also recommended by Zipprich (1995) and Martin and Manno (1995).

Even this degree of direct guidance in summary writing is insufficient for some students. They need to have the task broken down into much more manageable steps. One or more of the following procedures can be helpful to such students.

- The teacher provides a set of true and false statements based on the text just read. The statements are presented on the sheet in random order. The student must read each statement and place a tick against those

which are true. The student then decides the most logical sequence in which to arrange the true statements. When written out these statements provide a good summary of the text.

- The teacher provides some sentence beginnings, in a sequence which will provide a framework for the summary. The student completes the unfinished sentences and writes the summary.
- The teacher provides a summary with key words or phrases omitted. The words may be presented below the passage in random order, or clues may be given in terms of initial letters of word required, or dashes to represent each letter of the word. The student completes the passage by supplying the missing words.
- Simple multiple-choice questions can be presented. The questions may deal with the main ideas from the text and with supporting detail. In selecting the appropriate responses and writing these down the student creates a summary.

Word processors

Undoubtedly, the arrival of word processors in the classroom heralded a new opportunity for students of all levels of ability to enter the realm of writing and composing with enthusiasm and enjoyment. In particular, students with learning difficulties can gain confidence in creating, editing, erasing and publishing their own unique material through a medium which holds attention and is infinitely patient (Kerin 1990; Montague and Fonseca 1993).

In chapter 7 the use of word processors for developing lower-order reading skills such as word recognition and phonic decoding was discussed. Their use is not, however, confined to such drill and practice procedure, and higher-

order reading comprehension and writing skills can be enhanced through word processing (Au and Bruce 1990; Lewis and Doorlag 1991).

The present writer found that students with learning difficulties need first to develop at least some basic keyboard skills if the word processing is to be achieved without frustration. It is usually necessary to teach only the most essential skills to enable the student to access the program, type his work and save the material at regular intervals. Even this simple level of operation can give some students a tremendous boost to confidence and can encourage risk-taking in writing and composing. Printing can be left to the teacher or classroom aide in the beginning stages.

By combining the conference approach to write with the use of a word processor, the student's story in draft form can be printed, first without using the in-built spelling check. Student and partner, or student and teacher can then check the print-out and discuss good features of the story, and identify sentences or phrases or particular words that might be improved. It is useful for the teacher to note which words the student can self-correct in terms of spelling, and which misspelt words are not detected without assistance. A second draft of the story can then be made after the student does the necessary revisions and uses the spell-check.

Lewis and Doorlag (1991) reviewed research evidence on the benefits of using word processors with learning disabled students. Among their conclusions were that word processing seems to be of great benefit to students who don't usually write very much, and to those with the most severe spelling problems.

Motivating the Reluctant Writer

Book Production

Extending the earlier suggestion of using small booklets,

it is useful to have the students prepare somewhat more ambitious products. The following topics have proved to be particularly motivating for reluctant writers.

'A book about myself' My family. Where I live. What I do. Things I like. Things I hate. My friends. The book can also include factual material: e.g. height, weight, pulse rate, etc.

'A book about this school' Descriptions, Photos, Plans, Interviews with teachers.

'A book about my class' Descriptions, Photos, Interviews.

'Our book of jokes' Don't forget to censor these before parents' evening!

'Our neighbourhood' Location, Personalities, Shops, Industries, Entertainment.

'Our visit to ...' Impressions and summaries following field trips and excursions. (Don't make this a regular feature of every trip or you will find yourself in the position of the old joke where a class was on an excursion and two children saw a UFO land in a field. 'Look! Look!', one child began. 'Shut up you fool!' said the other. 'We'll only have to write about it.')

'A visitor's guide to Planet Zargok' Sections describing the people, the cities, the food, the transport, the animals and plants. A dictionary section to translate the planet's vocabulary into English.

'My book of monsters' An opportunity for creepy creatures to become the focus of both artwork and story-writing.

Video or film scripts

Much use is made of improvised drama, without a set script, in both primary and secondary classrooms. A useful variation is to get the students, particularly the reluctant

writers, to prepare a script in detail and then film or record the action after rehearsal. The combination of practical work, writing and production of something which can then be seen and discussed is usually adequate stimulus for even the most reluctant student.

'You write the rest' stories: an anecdote

One technique which this writer used when teaching in special classes was to prepare a story about a popular character currently appearing on children's television. The story is told or read to the class for enjoyment; but just when it gets to a cliff-hanger climax, the story stops. What happens next? Individuals can write their own episode or you can brainstorm ideas from the group.

It was particularly useful to type a simplified version of the story, spreading this over several half-pages of a small booklet and providing a frame for an illustration above each passage of print. The children, who were not proficient readers, could cope with the simplified material since it dealt with a story just read to them; the plot was familiar. The second half of the booklet was blank to allow the children to write their own endings and provide illustrations.

This example is from a *Doctor Who* story. Teacher's story ends with this paragraph:

He was in for a shock when he switched on the televiewer. The giant spiders were spinning a web over the Tardis. The strands looked as strong as rope. Suddenly the lights went out. He dashed to the controls and frantically flicked the switches. Nothing happened. The Tardis refused to move. They were trapped!!!

Patricia's story continues:

Dr. Who was cross. The spiders sat on the Tardis and sang a jungle song.

Dr. Who took the plants he had collected and did an experiment on them.

The plants turned into little people. The doctor put the little people outside and they began to chew through the web. Soon the wind came and the web blew away. The Tardis was free again.

Letter writing and project exchange between schools

It is very useful indeed to set up an exchange system between schools, particularly if one school is in the city and one in the country. It can start out as a 'pen pal' scheme but extend to exchange of class books, project materials, etc., and even result in visits between schools.

Choose a story

Prepare eight sets of small cards (four cards in each set), to correspond with the following categories:

Hero

Heroine

Action

Setting

Time

Feeling

Thing

Weather

In each category provide four different words. For example:

Hero: Batman, yourself, Spiderman, the Prime Minister

Heroine: Spiderwoman, Helga the Horrible, yourself, Cinderella

Action: fighting, escaping, flying, chasing

Setting: the jungle, under your bed, the moon, on a train

Time: 100 years ago, 100 years from now, midnight, school holiday

Feeling: anger, love, excitement, fear

Thing: monster, ghost, wild pig, meat pie

Weather: stormy, windy, cold, heatwave

Students take turns to choose, read and replace one card from each set until each student has the eight ingredients for a story they are to write. They can introduce the elements in any order in the story. The results can be shared with the group at the end of the session.

Over to you: Using the frameworks

- Apply any of the suggestions from this chapter to a student with learning problems.
- Evaluate the effectiveness of the strategy, and note any modifications you may have to make.
- List some stimulating opening lines, or introductory paragraphs, for stories which students can complete.
- Devise a set of notes and prompts which could be used by a student to help him or her write a brief summary from a passage of text.

Summary

This chapter has provided practical suggestions for helping poorly motivated and lower-ability students to write. Most of the techniques can be used within the normal classroom setting and require only minor modifications to the mainstream language arts programme.

The reader will have noted in this and earlier chapters the importance placed upon the teacher modelling effective ways of approaching a task, whether it be generating and composing ideas for a story, or revising the final draft. Students should be helped to develop and use effective task-approach skills for themselves, and in doing so, to feel good about the work they produce and the improvements they make.

Discussion point

- Discuss with your colleagues their ideas for writing which have proved to be very successful with mixed-ability classes.
- Devise a set of notes and prompts which could be used by a student to help him or her write a brief summary from a passage of text.
- 'Students with learning difficulties find writing very difficult and frustrating. It is best to avoid setting them too many writing tasks.' Discuss this statement.

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DEVELOPING SPELLING SKILLS

For many low-achieving students, spelling continues to present a problem long after reading skills have improved. This is sometimes due to the fact that too little attention is given to the explicit teaching of spelling skills and strategies. Instruction in spelling no longer features as prominently now in the primary school curriculum as it did some years ago.

Whole Language Perspectives on Spelling

The advent of the whole language philosophy has seen the teaching of spelling become fully integrated into children's daily writing activities, rather than being treated as a subject in its own right. It is argued that spelling instruction is kept within a meaningful context at all times when students are helped individually to spell the words they need to use as they write. This integrated approach is deemed to be the 'natural' way of acquiring spelling skill, and is therefore regarded as preferable to any form of direct teaching based upon the content of a predetermined spelling programme or word list. Children are taught the precise information they need at the exact moment that they need it. For example, a student may want to write the word 'please' but is unsure of the /ea/ sound within it. The teacher spells the word, and takes a moment to explain that often the letters 'ea' together make the long /e/ sound, as in sea, feast, deal, leap, seat, read, etc.

Used alone, the integrated approach to spelling seems to be inadequate for students with learning difficulties (Graham, Harris and Loynachan 1996). In classrooms containing twenty-eight or more students it is virtually impossible to find the necessary time to devote to such a personalized system. Even if a few moments can be devoted to each student within the writing lesson, helping the student with a spelling difficulty for a very brief period of time inevitably results in very superficial coverage of the specific spelling principle. Simply because the teacher has explained a particular rule on one day, there is no reason to suppose that the student will remember this information the next day unless it is reviewed and practised.

Dealing with words and spelling principles only as they are needed can also result in undesirable fragmentation of experience. For example, a child taught to spell the word 'fight' may not recognize that it belongs to the word family comprising right, sight, might, tight, light, bright, flight, etc. An essential part of understanding how words are constructed involves students in recognizing that many words share predictable letter patterns. It does not make sense to leave students to pick up this important knowledge through incidental learning. As Templeton (1992: 455) has observed, 'Spelling knowledge grows out of, and supports reading, writing and vocabulary study. *It also grows out of examining words in and of themselves*' (emphasis added).

Developmental Stages in Spelling Acquisition

It is important for teachers to be aware of the normal stages of development through which children pass on their way to becoming proficient spellers (Bentley 1990). Students pass through these stages at different rates, and it is unrealistic to expect a student to achieve a level of independence or accuracy in spelling which is beyond his or her current developmental level. The stages have been described in the following way:

Stage 1: Prephonetic At this stage the child 'plays' at writing (often using capital letters) in imitation of the writing of others. There is no connection between these scribbles and speech sounds or real words.

Stage 2: Phonetic At this stage the child relies mainly upon auditory perception and phonemic awareness. In the child's spelling there is evidence of an emerging knowledge of letter-sound correspondence, picked up through incidental learning. The invented words are quite recognizable as children begin to apply basic phonic principles as they write. Sometimes the phoneme they identify is equated with the letter name rather than the sound, as for example in 'rsk' (ask), 'yl' (while), 'lefnt' (elephant).

Toward the end of the phonetic stage, approximations move much nearer to regular letter-sound correspondences, as in 'sed' (said) or 'becos' (because). Even at this stage, some children have difficulty in identifying the second or third consonant in a letter-string and may write 'srong' (strong) or 'bow' (blow). Or they may fail to identify correctly the actual sound in the word and may write the incorrect letter, as in 'druck' (truck), 'jriv' (drive), 'sboon' (spoon).

It should be noted that the majority of individuals with poor spelling have reached this phonetic stage in their development but have not progressed beyond it. They now need to be taught to use strategies such as visual checking of words and spelling by analogy, in order to move to the next stage.

Stage 3: Transitional At this stage there is clear evidence of a more sophisticated understanding of word structure. The child has become aware of within-word letter strings and syllable junctures. Common letter sequences, such as -ough, -ious, -ea, -ai, -aw, -ing, etc., are used much more reliably. The children who are gaining real mastery over spelling at this stage also begin to spell by analogy, using words they know already in order to spell words they have never written before.

Stge 4: Independence At this stage the child has mastery of quite complex grapho-phonc principles, and also uses visual imagery more effectively when writing and checking familiar words. Flexible use is made of a wide range of spelling, proof-reading and self-correcting strategies.

Do we spell by eye, By ear or by hand?

The answer to the question do we spell by eye, by ear or by hand is almost certainly that we use all three modalities on the way to becoming proficient spellers. However, for many years teachers have regarded the encoding of words as predominantly a *visual* processing skill. For this reason, if students were fortunate enough to receive some guidance in spelling, the strategies they were taught to use have been mainly concerned with improving visual memory for word forms, for example the 'look-cover-write-check' strategy. Much less importance has been attached by teachers to *auditory* processing strategies as they relate to spelling. Indeed, some authorities actively dissuade students from attending closely to the sound values heard within spoken words since the individual letters used to represent these sounds may not be entirely predictable. It is argued that because up to three words in every ten are not written precisely as they sound, with perfect letter-to-sound translations, it is not beneficial to teach children to utilize phonic information when spelling. Counter to this argument is evidence to suggest that learning to read and learning to spell, particularly in the beginning stages, are far more closely related to auditory processing abilities than we previously believed (Goswami 1992).

Let us consider the general contributions made to spelling acquisition by visual perception auditory perception and kinaesthesia.

Visual perception: spelling by eye

Very proficient spellers appear to make great use of

visual information when writing words. It is obvious that visual clues are, indeed, extremely important for accurate spelling. The most common way of checking one's own spelling and detecting errors is to look carefully at the written word and ask oneself 'Does this word look right?' Strategies which involve the deliberate use of visual imagery, such as look-cover-write-check, are very effective for the learning of what are termed 'irregular' words, those with unpredictable letter-to-sound correspondence. To this extent we certainly do learn to spell by eye. The effective use of visual perception in learning to spell results in the student building up a memory-store of visual images of word patterns and of commonly occurring letter strings. The knowledge in this store can be called upon when the student attempts to write an unfamiliar word.

Learning to spell 'by eye' does not mean, however, that learners simply acquire incidentally the ability to spell by 'seeing' words as they read. Just 'looking' at words does not seem to be enough for most learners. It is necessary for them to examine a word very carefully, with every intention of trying to commit its internal structure and configuration to memory. As this behaviour does not come naturally to every learner, it is important that any student who lacks this experience be given the necessary instruction and practice. By implication, this may mean devoting specific time and attention to word study, over and above any help given to individual students as they write. It is most unlikely that such an important skill as word analysis could be adequately developed through incidental learning alone.

It must be noted that there is some indication that even good spellers may not really spell by visual imagery alone to the extent we once imagined. They may use visual memory effectively only to check the final appearance of a word written mainly by using other cues (Adams 1990). The current viewpoint is that spelling actually involves the co-ordinated

use of several different complementary process and strategies, including listening carefully to the component sounds and syllables within the word and by developing kinaesthetic images of the most commonly written words (Weckert 1989; O'Brien 1992).

Auditory perception: spelling by ear

Research has indicated that in the early stages of learning to read and spell it is important that a child can identify the different sound units within spoken words (phonemic awareness). The basic knowledge upon which successful reading and spelling develop seems to depend upon the child's awareness that spoken words can be broken down into smaller units and that these units can be represented by letters. In order to spell, young children in the first years of schooling may have to use auditory perception to a much greater extent than older children, simply because they have not yet had as much exposure to letter patterns within words through daily reading and writing experiences. Building up a bank of visual images of words and letter strings takes time and experience. The extent to which early attempts at spelling do rely upon attention to sounds in words and to letter-sound correspondences is evident in children's early attempts at inventing spelling.

Those who doubt the importance of auditory perception for spelling might ponder the fact that the spelling of many dyslexic individuals is frequently described as 'bizarre' in the sense that the letters written down often have no logical connection with the speech sounds they represent in the word (Perfetti 1992). It is also clear that one of the most common problems exhibited by many dyslexic students is an inability to analyse words they hear in terms of syllable units and separate phonemes (Clark 1992). It is likely that the bizarre spelling is a reflection of this auditory processing problem.

When spelling a word there is actually a complementary

association between auditory perception and visual perception. The process of writing an unfamiliar word requires the child first to identify the common sound units within the word, and to match these sound units with the appropriate letter clusters stored as visual images in what is termed 'orthographic memory' (Jorm 1983). Having identified the sound values in the word to be attempted, and having associated these sound units with specific letters, visual perception is then used to check that what the student writes on paper also has the correct appearance.

Kinaesthesia: spelling 'by hand'

Kinaesthesia can be defined as the sensation which produces an awareness of the position and movement of parts of the body by means of sensory nerves within the muscles and joints. Since the spelling of a word is typically produced by the physical action of writing, it is fair to assume that kinaesthetic memory may also be involved in learning to spell. Indeed, the extremely rapid speed and high degree of automaticity with which a competent speller translates a very familiar word, such as 'they', directly from its meaning to its graphic representation, supports the view that motor memory is involved. Nichols (1985: 3) has written, 'Spelling is remembered best in your hand. It is the memory of your fingers moving the pencil to make a word that makes for accurate spelling.' The frequent action of writing may be one of the ways of establishing the stock of images of commonly occurring words and letter strings in orthographic memory. The process of building up orthographic images in memory is also facilitated by the study of word families with common letter sequences, for example 'gate, date, late, fate, mate, etc. (Varnhagen and Das 1992; Templeton 1992; Gunning 1995).

It is often recommended that we should not think of spelling words letter-by-letter, but rather by concentrating upon the functional letter strings which form common units

in many words. This has some implications for the way in which we teach handwriting in the early years of schooling. Some evidence exists to support the notion that it is beneficial to teach young children to join letters together almost from the beginning of their instruction in handwriting, rather than teaching print script first and linked script much later. It is believed that joining the letters together in one smooth action helps children to develop an awareness of common letter strings (Cripps 1990).

The relative contributions of vision, audition and kinaesthesia

The extent to which visual perception, auditory perception and kinaesthesia contribute to the act of spelling a particular word seems to depend upon how familiar the word is to the writer. Unfamiliar words appear to require an analysis into their component sounds before an attempt can be made to write them. What has been written can then be checked for accuracy in terms of visual appearance. For example, when trying to spell the word 'WORK', the /W/ and the /RK/ can probably be encoded from their sound values, but the writer's orthographic visual memory has to be checked for the information that the vowel is O and not E in WORK (Jorm 1983). Very familiar, high frequency words, such as 'and', 'the' and 'are', etc., are probably written mainly from kinaesthetic memory and checked simultaneously for visual appearance.

Individual Differences among Spellers

As we have seen, three types of imagery appear to be used in spelling a word:

- visual—the way the word looks;
- auditory—the way the word sounds;
- kinaesthetic—the way the word feels when written.

To this list some experts would add:

- Speech-motor—the way the word ‘feels’ when spoken.

It seems that some students rely much more heavily on one type of imagery than on another and may need to be taught to use as many types of imagery as possible. For example, as indicated previously, dyslexic students are often found to be particularly weak in phonological skills and they rely too heavily on visual memory for recall of letter patterns. Training them in phonemic awareness and the application of basic phonic knowledge appears to have a positive effect on spelling ability (Ball and Blachman 1991).

Examination of the written work produced by students with learning difficulties can reveal a great deal about their current skills and specific needs in spelling. One of the most common problems is the tendency of the student to be overdependent on phonic knowledge and therefore to write irregular words as if they are regular. They appear to have remained at the phonetic stage of development for too long. Close examination of a student's exercise books, or the use of dictated word lists, will quickly reveal the extent to which the individual has this problem. The students producing these errors seem to lack the necessary strategies for carefully checking the visual appearance of a word, and even when encouraged to proof-read their material will fail to identify the errors.

Teaching Approaches

The whole word approach

This approach requires the student to memorize the overall letter patterns of individual words. Rather than attending to the sounds and syllables within the word, the student attempts to store the image of the word in long-term memory. Research has suggested that children can be trained to focus more attentively on a word and to improve their visual imagery for letter sequences (Sears and Johnson 1986).

To improve visual processing of whole words, one of the simplest aids to make and use is the flashcard. These cards are particularly useful for teaching irregular words and for the student who needs to be weaned away from a predominantly phonetic approach to spelling. The words are introduced to the student on cards about 30cm x 10cm. The word is pronounced clearly, and attention is drawn to any particular features in the printed word which may be difficult to recall later. The child is encouraged to make a 'mental picture' of the word, and examine it. With the eyes closed the child is then told to trace the word in the air. After a few seconds the student writes the word from memory, articulating it clearly as he or she writes. The word is then checked against the flashcard. The writing of the whole word avoids the inefficient letter-by-letter copying habit which some students have developed.

The general look-cover-write-check approach advocated by Peters (1985; Peters and Smith 1993) is based on these principles. To accommodate the possible importance of clear articulation to accurate spelling, some teachers add the word 'say', making the strategy look-say-cover-write-check. The strategy involves the following steps.

- Look very carefully at the word in the list. Say the word clearly. Try to remember every detail. For some students, finger-tracing over the word may help with assimilation and retention of the letter sequence.
 - Cover the word so that it cannot be seen.
 - Write the word from memory, pronouncing it quietly as you write.
 - Check your version of the word with the original. If it is not correct go back through the four steps again until you can produce the word accurately.
- * Teachers should check for recall several days and weeks later.

The look-cover-write-check approach is far better than any verbal rote learning and recitation procedure for learning to spell. It gives the student an independent system which can be applied to the study of any irregular words set for homework or to corrections or omissions from free writing. Students can work in pairs where appropriate, to check that the procedure is being followed correctly by the partner. It is claimed that children as young as five years old can be taught this visual strategy for spelling (Peters and Smith 1993).

Several computer programs designed to develop spelling skills have come on to the market (e.g. *Spell It Plus*, Davidson and associates 1991). Teachers should ensure that the way in which the words are presented on the screen causes the students to attend carefully to the sequence of letters, to identify these letter strings within words and to type out the words from memory. Programs which focus too much attention on spelling letter by letter are far less effective.

The phonemic approach

It is inappropriate to use the look-cover-write-check strategy if the target word could be written as it sounds. The phonemic approach encourages student to attend carefully to sounds and syllables within words, and to write down the letters or letter strings most likely to represent these sounds. While it is true that some 30 per cent of English words are not phonemically regular, some 70 per cent of words do correspond reasonably well with their letter-to-sound translations.

The phonic knowledge necessary for this approach goes well beyond knowing the common sounds associated with each single letter. It is necessary to draw on a knowledge of letter strings which represent larger units within words. When students have acquired this level of proficiency the percentage of words which can be spelled as they sound increase very significantly (Jongsma 1990).

The morphemic approach

This approach to spelling teaches the students to use a knowledge of the smallest unit of meaning within a word, the morpheme, to work out its probable spelling. For example, the word 'recovered' comprises three morphemes (re-cover-ed), as does 'unhappiness' (unhapp[y]-ness). The latter example also illustrates the use of a rule (y to i) when combining certain morphemes. When using a morphemic approach, teachers also need to teach these rules.

Spelling rules

Some experts advocate teaching spelling rules to students. The present writer found it difficult to teach spelling rules to students with learning difficulties. Cripps has said that because rules are often more complex than the word itself they are not recommended (Cripps 1978). In many cases, it is easier to help the students spell the words they genuinely need for their writing, and also teach them the strategies to use when attempting to learn any new word, rather than to drill complex rules. However, rules may be of some value for some students, particularly those of at least average intelligence who have a specific learning disability. The rules which are simple and have few exceptions are obviously of value and should be explicitly taught (e.g. 'i' before 'e' except after 'c').

Dictation

Dictation has traditionally been used for testing students. However, unless the results are to be used for diagnostic purposes, e.g. the analysis of errors, there is little to support the continued use of dictation exercises.

It is sometimes suggested that dictation develops listening skills and concentration, and at the same time gives students experience of words in context. It is recommended under this system that the material be presented in written form for the children to study *before* it is dictated. In this way there is an opportunity to point out any particularly difficult words.

Another approach encourages proof-reading and self-correction. An unseen passage at an appropriate level of difficulty is dictated for students to write. They are then given a period of time to check and alter any words which they think are incorrect, perhaps using a different coloured pen. The teacher then checks the work and can observe two aspects of the student's performance. First, it is useful to look at the words the child has been able to correct (or at least knows to be wrong). Second, the teacher can record words which were in fact wrong but were not noticed by the student. If, based on their level of difficulty, these words should be known by the student, the teacher must make every effort to teach their correct spelling since they have become firmly set as incorrect responses.

Finally the use of phonic dictation, where the teacher deliberately stresses the sequence of sounds in a tricky word or breaks words into syllables, can be helpful in developing a student's sensitivity to the phonemic components of words.

Should spelling lists be used?

The notion that lists can be compiled which contain words which *all* students should know and use at a particular year or grade level has, to some extent, been abandoned. However, spelling lists continue to form the core of many classroom spelling programmes. The question most often asked by teachers is, 'Do students learn to spell best from lists?' If the question refers to lists of words which individual students actually use and need in their writing, the answer is certainly 'yes'. If the lists are based on other criteria, e.g. words grouped according to visual or phonemic similarity, the decision to use such a list with a particular student or group of students must be made in the light of their specific learning needs.

The value of lists or word groups is that they may help the student to establish an awareness of common letter

sequences, e.g. -ight, -ought. This awareness may help a student take a more rational approach to tackling an unfamiliar word. The limitation of formal lists is that they always fail to supply a particular word a student needs at the appropriate time. The most useful list from the point of view of the weakest spellers will be one compiled according to personal needs and common errors. The list might be given the unofficial title 'Words I find difficult'. A copy of this list can be kept in the back of the student's exercise book and used when he or she is writing a rough draft or proof-reading a final draft of a piece of work.

Developing Strategic Spellers

Students have become truly independent in their spelling skills when they can look at a list of words and select the most appropriate strategy to use for learning each word. For example, they need to be able to look at a word and decide for themselves whether it is phonemically irregular or regular. For an irregular word, they may need to apply the look-cover-write-check strategy, coupled perhaps with repeated writing of the word for practice. For some irregular words they may also need to call upon prior knowledge of simple rules about doubling letters, or dropping or changing a letter. If the word is regular they need to recognize that they can spell it easily from its component sounds. When students can operate at this level the shift is from rote learning to an emphasis on studying words rationally.

This level of independence does not come easily to all students. Many individuals need to be taught how to learn material. Some students, left to their own devices, fail to develop any systematic approach. They may just look at the word. They may recite the spelling alphabetically. They may copy letter-by-letter rather than writing the whole word. They may use no particular strategy at all, believing that learning to spell is beyond them. Any serious attempt at helping

children with spelling difficulties will involve determining *how* they set about learning a word or group of words. Where a student has no systematic approach it is essential that he or she be taught one.

In cognitive and metacognitive approaches to spelling instruction, students are taught specific self-regulatory strategies to use when learning new words or checking the accuracy of spelling at the proof-reading stage of writing. For example, they are taught to ask themselves, 'How many syllables do I hear in this word?; Do I have the right number of syllables in what I have written?; I'll try it again. Does this word look correct?', etc. According to Wong (1986: 172). 'Effective spelling instruction appears to contain two components: knowledge of phonics and knowledge of spelling strategies'. In particular spelling strategies must include steps that cause the students to check for accuracy without being constantly reminded to do so.

As with all other examples of strategy training described in this book, the teacher's key role is to model effective strategies to 'think aloud' and demonstrate ways of going about the task of spelling, checking and self-correcting.

Remedial Approaches

Simultaneous oral spelling

This approach was first developed by Gillingham and Stillman in 1960. It has been applied very successfully by Bryant and Bradley (1985) for remediation of spelling problems in individual tutorial settings, and is appropriate for any age level. The approach involves five steps:

- select the word you wish to learn, and have the teacher pronounce it clearly;
- pronounce the word clearly yourself while looking carefully at the word:

- say each syllable in the word (or break a single syllable word into onset and rime);
- name the letters in the word twice;
- write the word, naming each letter as you write it.

Repeated writing

The practice of having a student correct an error, by writing the correct version of the word several times is believed by some teachers to serve no useful purpose. They consider that it is a form of rote learning that can be carried out without conscious effort on the part of the learner, and that words practised in this way are not remembered later. It is true that if the student carrying out the repeated writing is thinking of other things, or is distracted by noise or activity, the procedure is of little value. However, repeated writing of a target word can be very helpful if the learner has every intention of trying to remedy an error and is attending fully to the task. It is one way in which kinaesthetic images of words can be more firmly established.

Old Way: New Way Method

Lyndon (1989) has identified the psychological construct of 'proactive inhibition' as a possible reason for the failure of many conventional remedial methods to actually help a student 'unlearn' incorrect responses, such as habitual errors in spelling. Proactive inhibition (or proactive interference) is the term used to describe the situation where previously learned information interferes with one's ability to remember new information or to acquire a new response. What the individual already knows is protected from change.

Lyndon's approach, called 'Old Way: New Way' uses the student's error as the starting point for change. A memory of the old way of spelling of the word is used to activate later an awareness of the new (correct) way of spelling the word.

The following steps and procedures are used in Old Way: New Way:

- Student writes the word in the usual (incorrect) form.
- Teacher and student agree to call this the 'old way' of spelling the word.
- Teacher shows student a 'new way' (correct way) of spelling the word.
- Attention is drawn to the similarities and differences between the old and the new.
- Student writes word again in the old way.
- Student writes word in the new way, and discusses the differences.
- Repeat five such writings of old way, new way and articulation of differences.
- Write the word the new way six times, using different colour pens or in different styles. Older students may be asked to write six different sentences using the word in its 'new' form.
- Revise the word or words taught after a two-week interval.
- If necessary, repeat this procedure every two weeks until the new response is firmly established.

The Directed Spelling Thinking Activity (DSTA)

This approach is advocated by Graham, Harris and Loynachan (1996) for use with learning disabled students. It is basically a word-study activity in which a group of students are helped to compare, contrast and categorize two or more words based on discovery of points of similarity and difference. The goal is to raise the students' awareness of

spelling patterns and the more complex grapho-phonetic principles. For example, students may explore words with the long /a/ sound, as in 'pay', 'pail', 'male', etc. They discover that the long /a/ is represented not only by 'ay', but also by 'ai' (nail) and by the letter 'a' in several words with the final 'silent e' (as in lake, mate, made, late, etc.). The students then classify other similar words into these groups, or decide that a particular word is an exception to the principle. Follow-up activities might include looking for words conforming to the rule in reading material, scanning their own writing for such words, adding similar words to a class list over a period of time.

Some Final Points

When planning an individualized programme in spelling the following points should be kept in mind.

- For the least able spellers daily attention will be needed, with weekly revision and testing for mastery.
- Over a period of time, collect a list of words frequently needed by students to whom you are giving special help. Use this list for regular review and assessment.
- Once a special programme is established, students should always work on specific words misspelled in free writing lessons, as well as on more general word lists or word families in order to develop insight into word structure.
- Since repetition and overlearning are important, it is useful to have a range of games and word puzzles available to reinforce the spelling of important words. The games must be closely matched to the objectives of the programme, or they may simply keep students amused without leading to improvement.
- Teachers in high schools should try to give students

help in learning to spell words from specific subject areas: e.g. ingredients, temperature, chisel, theory, etc.

- Use some form of visual record of improvement, an individual progress chart or simple graph to indicate the number of new words mastered each week.
- When making a correction to a word, a student should rewrite the whole word not merely erase the incorrect letters.
- The value of having students spell words aloud is very questionable, as spelling is essentially a writing activity. The visual appearance, and the flow of the letters in sequence, provide important clues to the speller which are absent when the word is spelled aloud.
- A neat, careful style of handwriting which can be executed swiftly and easily by the student is an important factor associated with spelling ability. It cannot be inferred that good handwriting *per se* causes good spelling; but laboured handwriting and uncertain letter formation almost certainly inhibit the easy development of spelling habits at an automatic response level.

Over to you: Putting it all together

Write a brief article for a parents' magazine indicating ways in which spelling can be taught in a mixed-ability class of children in the age range 7 years to 9 years. Also suggest strategies parents might use at home to assist their children to improve their spelling skills.

Summary

Most of the techniques for teaching and improving spelling described above can be used within the normal classroom setting and require only minor modifications to the mainstream language arts programme. It is implied in this

chapter that teachers need to set aside time each week for word study, otherwise this important topic may never receive the systematic attention it deserves. However, it is equally important that spelling skills are also tackled within the context of the children's daily reading and writing experiences. Too much attention to word-study in isolation will develop skills that do not generalize to real writing situations.

DISCUSSION POINTS

- 'Spelling ability is caught, not taught.' Discuss this statement.
- How might a classroom teacher develop a core list of words most commonly needed by students in their daily writing? How might such a list be used within the language arts curriculum in that class?
- Examine and evaluate some computer programs designed to increase spelling ability.

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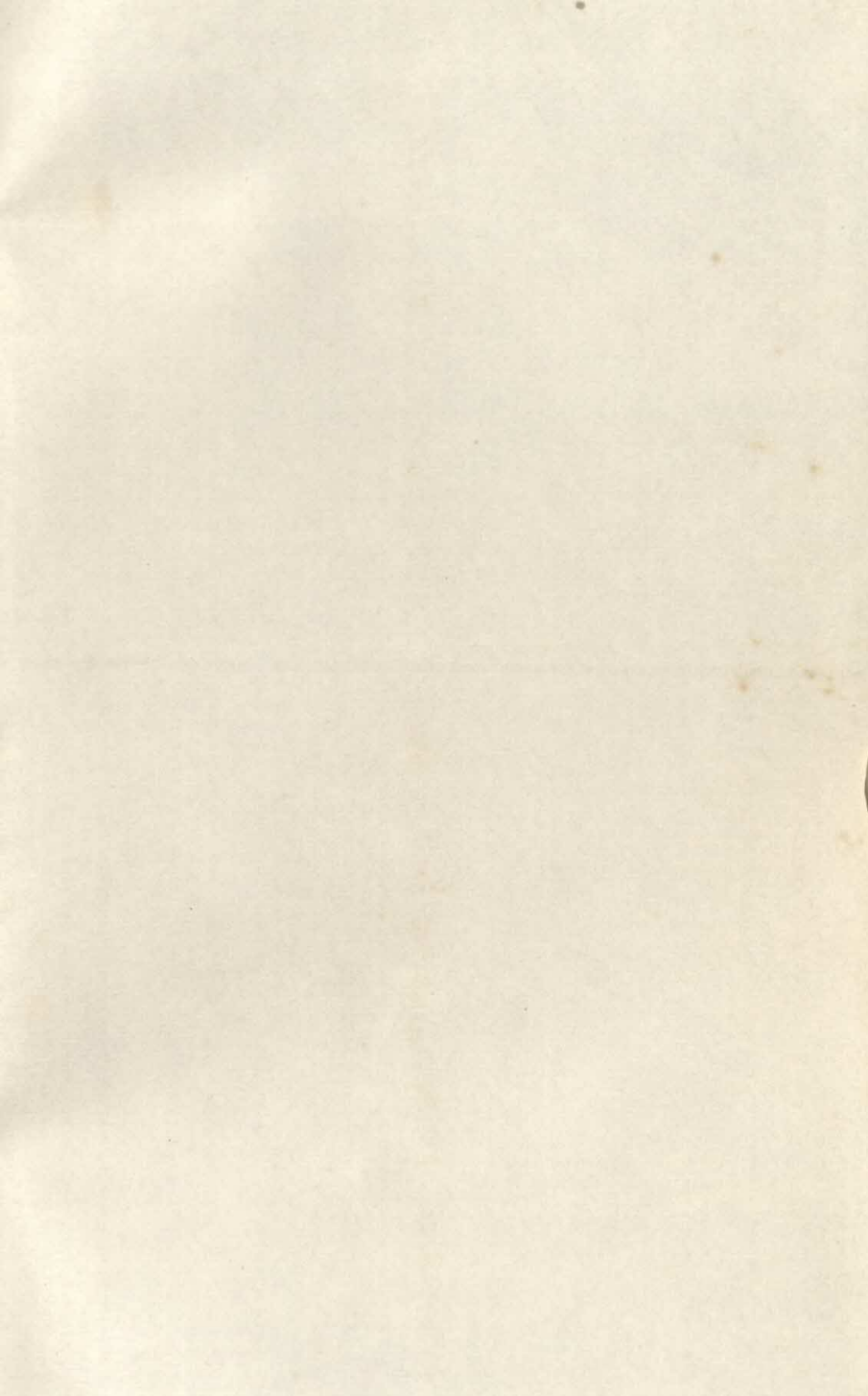
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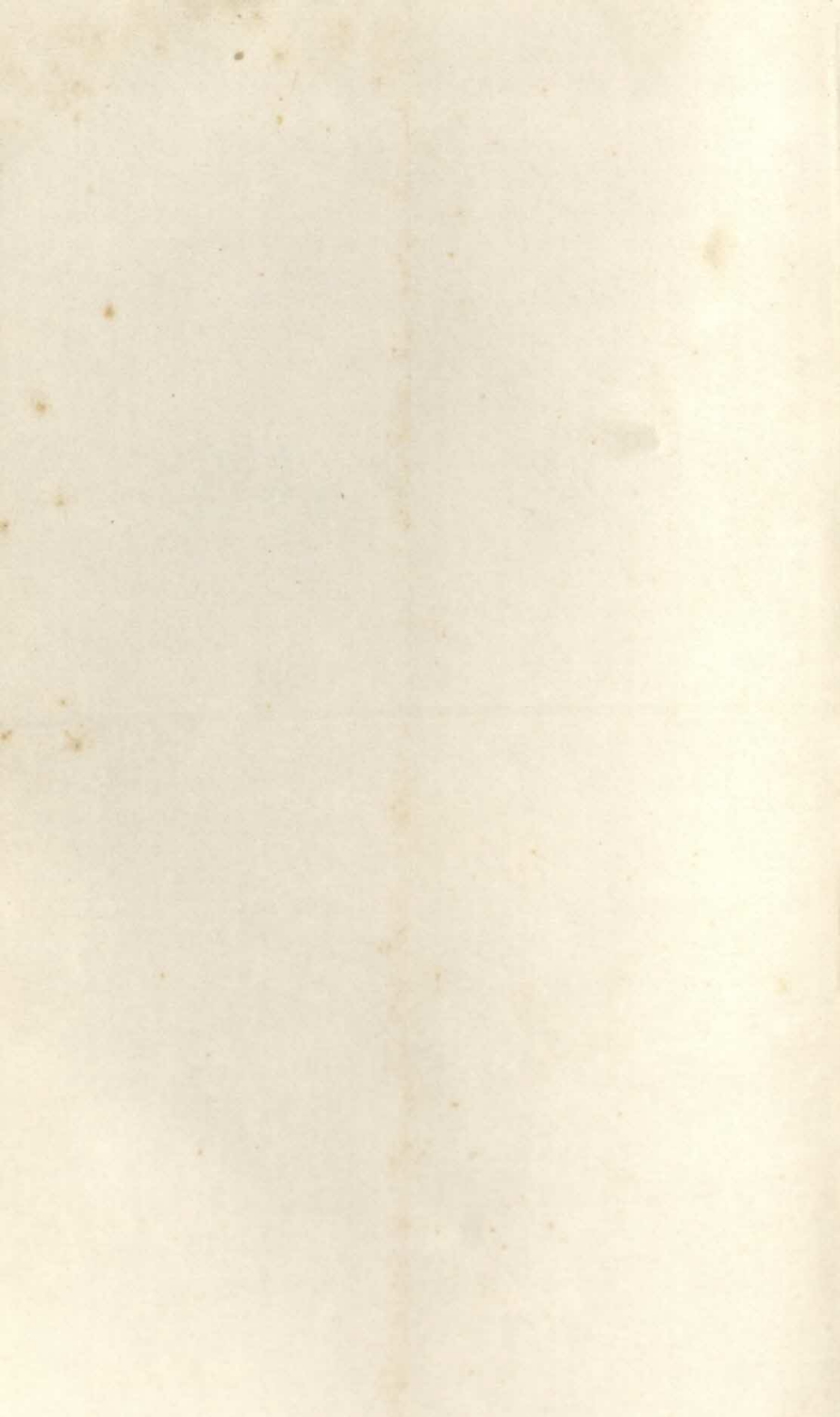
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William James, M.Sc., M.Phil., Ph.D. is a renowned educationist. After teaching at many institutions, he opted guidance and counselling for physically handicapped and mentally charged children. A regular contributor to different professional journals/magazines, he has written profusely on special education and social development.

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